

UNIVERSITY OF CALIFORNIA

Los Angeles

Conditions of the Hong Kong Section:

Spatial History and Regulatory Environment of Vertically Integrated Developments

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by

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ABSTRACT OF THE DISSERTATION

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Professor Dana Cuff, Chair

This dissertation explores the urbanism of Hong Kong between 1967 and 1997, tracing the history of Hong Kong's vertically integrated developments. It inquires into a Hong Kong myth: How can minimum state intervention gather social resources to build collective urban form? Roughly around the MacLehose Era, Hong Kong began to consciously assume a new vertical order in urban restructuring in order to address the issue of over-crowding and social unrest. British modernist planning provided rich approaches and visions which were borrowed by Hong Kong to achieve its own planning goals. The new town plan and infrastructural development

transformed Hong Kong from a colonial city concentrated on the Victoria Harbor to a multi-nucleated metropolitan area. The implementation of the R+P development model around 1980 deepened the intermingling between urban infrastructure and superstructure and extended the vertical urbanity to large interior spaces: the shopping centers. Metro stations were fused with the basement of superstructure and formed into a continuous podium structure connecting the towers and the ground surface. Underlying this urban form is a planning system based on speculation, calculation and contracts. This dissertation is composed of three parts. The first part (Chapter 1 and 2) positions the phenomenon of “Hong Kong Section” in the historical lineage of metropolitan urbanism, or the “Culture of Congestion,” defined by a breed of urban scholars including cultural critic Walter Benjamin and architect Rem Koolhaas. The second part (Chapter 3) is a review of the planning history of Hong Kong on the basis of a series of colonial city plans and programs, with a focus on its evolving vertical integration. It argues that the vertical order results from planning regulation and programmatic demands. The third part (Chapter 4 and 5) investigates two types of “Hong Kong Sections”: the interiorized exterior (networked pedestrian space clustering around metro stations) and the exteriorized interior (retail center as interiorized public space). The conclusion states that the specific planning regulation and programmatic demands of Hong Kong has yielded a new Asian urbanism and a new perspective for considering the relationship between urban form and population density.

The dissertation of Zheng Tan is approved.

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ABBREVIATIONS

CIAM	The Congrès internationaux d'architecture moderne (International Congresses of Modern Architecture)
CTS	Comprehensive Transport Study
HKIA	Hong Kong Institute of Architects
HKIP	Hong Kong Institute of Planners
HKSAR	Hong Kong Special Administrative Region
HOPSCA	A Complex including Hotel, Office, Ecological Park, Shopping Centers, Convention, and Apartments
MTRC	Hong Kong Mass Transit Railway Corporation
PADS	Port and Airport Development Strategy
POPS	Privately Owned Public Space
R+P	Rail-Property Development
TDD	Territory Development Department
TOD	Transit Oriented Development
URA	Urban Renewal Authority

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VITA

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Tan, Zheng. “Trade Magazines and Urban Consciousness: Seeking an Urbanism of Contemporary Hong Kong, 1965-1984.” *Architectural Journal* (建築學報, China) , 2013, Issue 11.

Tan, Zheng. “Retail Space in the Perspective of ‘Non-places’: Hong Kong Vertical Shopping Centers and Communality in the Private Realm.” *New Architecture* (新建築, China) , 2013 Issue 10.

Tan, Zheng. “The Welfare Attribution of Shared Space: From Buchananism to Shatin Value.” *Urban China* (城市中國, China) , Issue 57.

Tan, Zheng. “The Volition of an Instant City.” *Urban China* (城市中國, China) , Issue 52.

Tan, Zheng. “Sophistry of Digital Craft: Epistemological Reflection on Digital Form Making.”
Architectural Journal (建築學報), 2009, Issue 11.

Tan, Zheng and Bingren Xiang. “Draftsman to Master Builder: Parametric Design Changes the Role of Architects,” *New Architecture* (新建築), 2006 Issue 1, (co-authored with Prof. Bingren Xiang).

CONFERENCE PRESENTATIONS

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Tan, Zheng. “The Evolving Joints: Konrad Wachsmann and the Metaphysical Abstraction of Building Assembly,” the 64th SAH Annual Meeting (Graduate Lightning Talk), New Orleans.

Chapter 1. Introduction

1. Hong Kong Section

It was not until the early 1960s that the concept of vertical integration entered into the urban planning documents of Hong Kong. In April 1959, the Governor of Hong Kong directed that the Town Planning Board prepare a plan for the redevelopment of the lands at Central released by the Royal Navy and the War Department. Presently, that 76-acre reclamation land along the Victoria Harbor is one of the most intensively built-up areas in the world. In August 1961, a report titled “City of Victoria: Central Area Redevelopment” was completed, giving a period of two months for submission of objections. This report offered a view of urban design that prioritizes the grade-separated pedestrian precincts and public transportation services over the motorists. Such a view is a faithful reflection of the postwar British town planning methods, at the same time testifying to the political subordination of Hong Kong to Great Britain. After the MacLehose Era, Hong Kong began to take up a planning system different from the postwar modernist urbanism. It is noteworthy that, unlike the railways of the United Kingdom which were nationalized in 1914, the Mass Transit Railway Corporation (MTRC) of Hong Kong, established as a statutory corporation in 1975, was granted land and property development rights by the Hong Kong government. Thus MTRC acted both as a semi-state agency and as a private developer. Such a policy enabled MTR to intensively develop properties either above or adjacent to the MTR stations, facilitating the vertical integration between urban architecture and circulation in Hong Kong. Thus, by 1997, public transportation services have been incorporated into the urban topography of Hong Kong. Specifically, the networked multilevel pedestrian precincts and the imbedded public transportation services in the everyday urban fabric constitute

the two guiding spatial principles which shaped the built environment of Hong Kong.

This dissertation explores the evolving institutional environment in which the traffic-commerce integration of Hong Kong made its appearance. It inquires into a programmatic formula by which the skyscrapers connect with the streets, sidewalks and metro. It seeks to develop a more grounded language to interpret urban patterns by their vertical order. However, there has been an abnormal absence of a formal theory for planning practices in the vertical dimension, which was indeed a critical constituent of civic design with regard to a common path of modernity. Notably, the vertical integration between mass transit and commercial properties appeared in the United Kingdom in the middle of the 19th Century. Such integration created a new urban pattern which blended traffic and commercial developments together, such as the Great Western Hotel at Paddington, London. In the early 20th Century, only with the advent of mega-structures to separate the wheeled traffic (both trains and automobiles) from the pedestrians did the complexity of this city travel to the realm of architecture. For instance, in New York's Grand Central Terminal (Warren and Wetmore, 1913), the railway company sold the "air-rights" above the underground train yard for commercial developments and created a car-free pedestrian network for the riders. Likewise, the Rockefeller Center (Raymond Hood, 1939) and Washington Bridge Terminal development (Pier Luigi Nervi, 1963) reflect the same formula. Notably, starting from the late 19th Century, two interconnected urban forms emerged simultaneously. On the one hand, large interior spaces became an intensified representation of the city with the installation of their own circulation system, such as department stores, shopping arcades and exhibition halls. On the other hand, the interchanges of mass transportation have been integrated with the building blocks, thus resulting in a form of interconnected, multilevel structure with a broad set of complementary uses (commercial, hospitality, tourism). The integration of

infrastructure and superstructure has yielded a new perspective for understanding the reciprocations of market logic and urban forms.

Hong Kong is a city with complex multilevel ordering of urban functions: subways, streets, elevated pedestrian walkways, shopping arcades, and commercial or residential towers. This vertical order is the outcome of a series of geographic, economic, and regulatory determinants. Hong Kong is an anthropological spectacle with its extreme population density and spatial complexity. However, the vertical integration of Hong Kong coincides with the strange fact that Hong Kong has never developed a comprehensive urban design guideline directly related to such a cityscape. On the level of urban planning, few formal codes have been provided concerning the vertical configuration except a few strategic guidelines. The planning of Hong Kong is characterized by two seemingly competing logics — a rational, strategic planning system which has been politically abandoned in the UK under Prime Minister Margaret Thatcher’s Conservative administration; and market logic which drives continuous redevelopment and densification.¹ As a result, there is a disconnection in scholarly literature between the studies on the public policy and the perspective of urban design.

Throughout the text, “city section” carries both a literal (as a way of architectural representation through cross-sections of a city) and an extended denotation (as a form of place-making and space-sharing in vertical ways). The term covers both spatial configurations and the regulatory,

¹ Lawrence W.C Lai, and Mark Baker, “The Final Colonial Regional Plan That Lingers On: Hong Kong's Metroplan,” *Habitat International* 41, no. January (2014): 216–28.

managerial context behind the spatial pattern. Basically, the dissertation inquires into a form of urban anthropology with regard to: (1) an urbanism of congestion; (2) the interlocking between public transportation and commercial development as a (post)modern phenomenon in the metropolitan Asia; and (3) institutional arrangement underlying the urban forms. The relationship between these separate subjects has yet to be investigated, and it raises an even general question about architecture and urbanism: How does the institutional environment of Hong Kong yield a new urban pattern which might elucidate the existing disciplinary structure of architecture?

The intensive spatial mutation in Hong Kong during and after the MacLehose Era (1971-1982) is institutional as well as topographical. A distinction should be drawn between the planning practices before and after the MacLehose Era. The new town plan auspiciously enlarged the urbanized area of Hong Kong, turning it from a colonial port city concentrated on the Victoria Harbor into an urbanized territory with its own metropolitan cores and satellite towns. Hence, “Hong Kong” became a regional concept. The city of Hong Kong was traditionally confined in the steep water edges along the Victoria Harbor (the “City of Victoria” of Hong Kong Island and the Yau-Tsim-Mong District of Kowloon). The “Abercrombie Report,” prepared by the British planner Patrick Abercrombie in 1948 and the *Colony Outline Plan* in 1969 (later called *Hong Kong Outline Plan*) were the only two administrative planning documents covering the whole territory of Hong Kong. However, nothing substantial was done before 1970 to turn the vision of Abercrombie into more detailed statutory plans. The concept of “regional planning” became materialized when the new town plan of Hong Kong was officially launched with the establishment of the Territory Development Department (TDD) in 1973. Such a spatial shift added a regional dimension to the existing urban pattern of Hong Kong and created new forms of

activity centers. A mix of space users, each with different travel patterns, complicated the spatial configuration of the metropolitan cores and new town centers. Amongst these emergent urban forms, the podium-tower structure is the most vital and generic model which defines Hong Kong's city profile.

Hong Kong is the first East Asian city which developed the podium-tower building type into a uniform urban space. This building type is characterized by a wide podium base housing a shopping mall and car parks, with tall residential or commercial towers resting on the top. In some cases, they are connected by pedestrian bridges, formulating a continuous pedestrian precinct encompassing a variety businesses and community services. Gradually, such structures began to serve as a transitional space between the residential and office towers above and the metro line below, covering a larger catchment area around a terminal. The prototype of podiums originally appeared in Ludwig Hilberseimer's "Highrise City" proposal (1924). In this proposal, he profiled a continuous urban form composed of linked podiums and generic slab-like towers. However, modernists such as Hilberseimer rarely addressed the institutional mechanisms underlying this totalitarian urban vision. On the contrary, the podium structure in Hong Kong is a building element which corresponds to the city's unique market condition and regulatory environment. Composite buildings, buildings with 100% site coverage, partly domestic and partly non-domestic, gained popularity in the 1950s and 60s in Hong Kong. In 1962, an amendment to the building codes introduced a new building form with continuous podiums (15

meters from ground level) and free-standing towers. When more Chinese immigrants fled from Hong Kong to the entire Pacific Rim after the 1984 Sino-British Joint Declaration, fearing that Hong Kong would soon be ruled by a communist regime, the podium-tower prototypes spread around many major cities of North America and Australia due to investment from Hong Kong.² Early models of the podium structure appeared in abundance in the new settlements of Hong Kong as a way to house maximum retail tenants with uniform column layouts. New forms of integration between mass transportation and commercial property development arose in the early 1980s when the existing spatial organization became inadequate to cope with the increasing population density and development intensity. In this circumstance, podiums were turned into integrated, multi-functional structures with subsurface components, in many cases attached to the subway depots and other transportation facilities. The “podiumization” of Hong Kong obscures the traditional binaries of city-architecture, ground-floor, private-public and circulation-activity, and cultivates an architectural design culture. The embodiment of the everyday lived space as a podium-like structure resulted from less-than-conscious practices, albeit it was incorporated into architectural agendas of Hong Kong through rigorous implementation of building codes and regulation.

The study of the *Hong Kong Section* should be situated in terms of interior urbanism and the

² Trevor Boddy, “New Urbanism: ‘The Vancouver Model’”. *Places*, no. 16 (2) (2004). Leading the circulation of the podium-tower style was the developer Li Ka Shing, In 1988, Li bought the 240 waterfront acres of Vancouver railway lands that had been used for the Class “B” transportation-themed World’s Fair “EXPO 86.” As a result, a “Pacific Concord” style was then introduced, with thin towers resting on townhouse or retail podiums.

“privately owned public space” (POPS) as well as its variations in the cityscape of modernity, a topic that will be taken up further in the following chapters.³ This evolution of the podium base of Hong Kong’s skyscrapers seems reminiscent of the “mall” in the contemporary American context. However, they differed in their underlying programmatic demands. Fundamentally, the “mall” in American cities is a representation of the early 19th Century’s urban utopia, a postmodern replica of the communal life of Fourier and Owen’s socialist utopia. As Jameson remarks in his essay about the Westin Bonaventure Hotel in Los Angeles, the grand atrium of the hotel is a total space, a complete world, and a kind of miniature city accommodating a “hypercrowd.”⁴ In a shopping mall or any interior public space, Charles Fourier’s socialist utopia “Phalanstery” is represented through the medium of consumption, an ironic reversal of the social utopia imagined by Fourier, who sought unity through collective productive activity and social reorganization.⁵ Apparently the American mall is an antidissertation to authenticity,

³ Marshall Berman, *All that is Solid Melts into Air*, 162. Regarding the “street” and “home,” Berman states, “The difference between the modernist and the anti-modernist...is that the modernist makes himself at home here, while the anti-modern searches the streets for a way out... Then, no matter how closely the anti-modernist may cling to this aura of spiritual purity, he is bound to lose it.”

⁴ Fredric Jameson, “The Westin Bonaventure Hotel,” in *The Postmodern Presence: Readings on Postmodernism in American Culture and Society*, ed. Arthur Asa Berger (Walnut Creek, CA: AltaMira Press, 1998).

⁵ Margaret Crawford, “The World in a Shopping Mall,” 6. For Crawford, the urban mall megastructure has become a complete and fully inhabitable world. She writes, “the fragmented forms and functions of modern living are being brought together under the mall’s skylighted dome. This suggests the possibility that the unified world of premodern times might be reconstituted through the medium of consumption, an ironic reversal of the redemptive design projects imagined by nineteenth-century utopians such as Fourier and Owen, who sought unity through collective productive activity and social reorganization. Although Fourier’s Phalanstery merged the arcade and the palace into a prefigurative mall form, its glass-roofed corridors were intended to encourage social intercourse and foster communal emotions, rather than stimulate consumption.” Crawford confesses that the popularity of commercial public spaces, or the “variations on a theme park” in

whereas the podiums of Hong Kong reflect the authentic anthropological character around and after the MacLehose Era. The vertically integrated space of Hong Kong reflects the city's traditional urban form of mixed-usage. It is an extension of the improvised adaptation which occurs at different scales of everyday urban practice (Figs. 1, 2, 3).

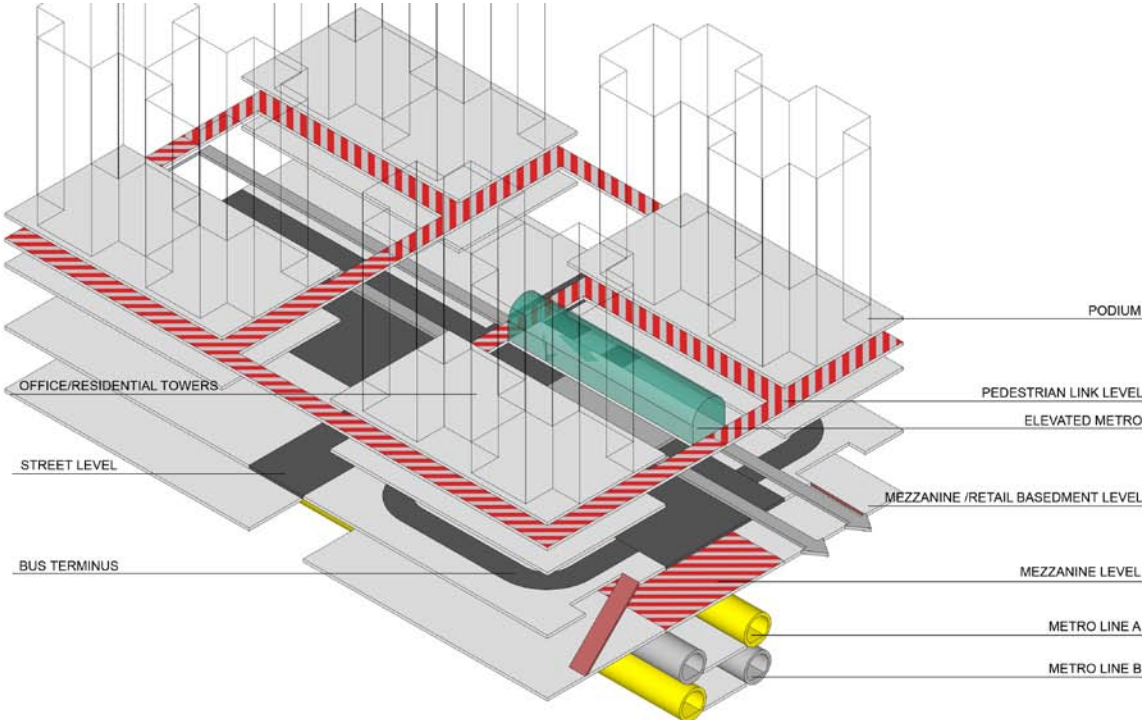


Figure 1. A typical city section of Hong Kong showing its vertical ordering.

Sorkin's text, is always used to frame a pervasive narrative of loss that contrasts with the current debasement of public space with classical models, such as the Greek agora or Italian piazza. She argues that underlying the narrative of the "loss of public space" is a form of historical determinism that cannot see the possibility of political struggle against "inexorable forces" (Mike Davis). Hence, in *Everyday Urbanism*, she seeks to rethink our conceptions of "public," "space," and "identity."

FOR TODAY AND
TOMORROWS NEEDS
WELLFORM.

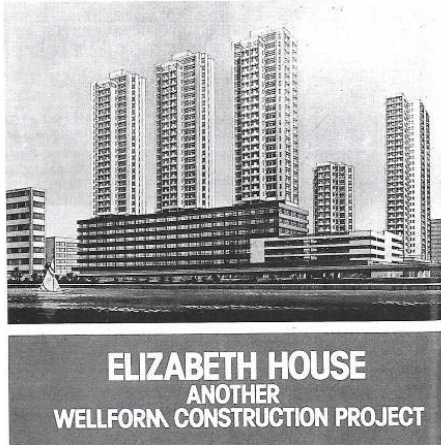
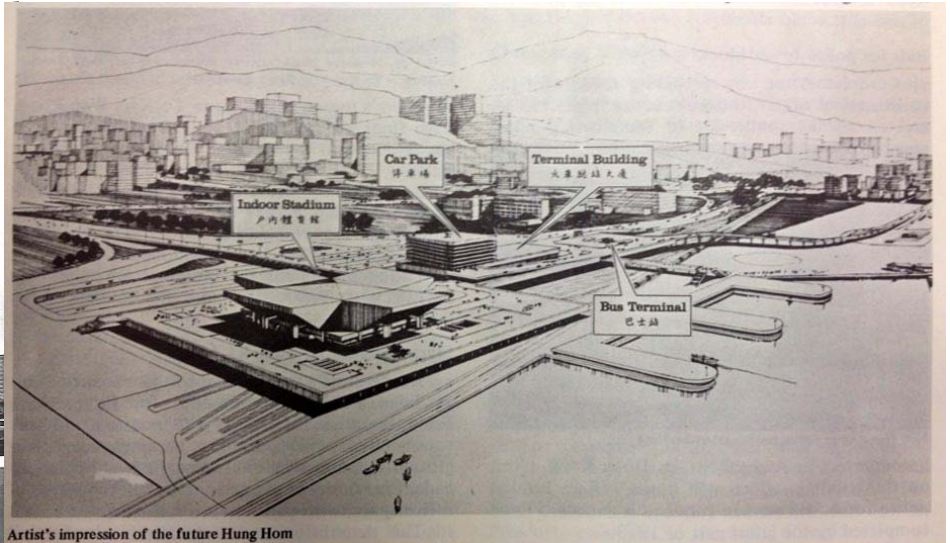


Figure 2. An advertisement showing a typical “podium-tower” building in the 1970s.
Source: *Asian Architect and Builder*, June 1978.



Artist's impression of the future Hung Hom

Figure 3. Artist's impression of the new Hung Hom station complex, sitting atop a broad terrace over the railway depot.
Source: *Far East Builder*, 1971.

To summarize, as an analytical framework, *Hong Kong Section* unfolds the actions of meshing, weaving, warping and folding within the built environment of Hong Kong, which cannot be described by master plans or elevations. It signifies a series of practices, regulations, objects, and socio-spatial relations which will contest many assumptions and conjectures in existing architectural and urban studies, particularly regarding the notions of public space, topography, density, mobility, and spatial equity. It discovers missing opportunities in the hidden dimensions and investigates the ways in which spatial agreements could be reached in a sectional dimension.

2. Urbanism of Congestion

Several studies have inspired my survey on the vertical integration of Hong Kong, albeit they might not be directly related to the topics outlined here. The one of particular importance is Carol Willis' *Form Follows Finance*, in which tall buildings are treated as “vernacular

architecture.” “Vernacular” is used by Willis to identify structures which are less designed than evolved in response to functional demands and site particulars.⁶ Willis downplays the role of architects as designers so as to emphasize the “parameters fixed by municipal regulations and by functional, structural and programmatic demands.” Willis’s work is influenced by a few previous studies roughly initiating a discourse of skyscrapers and metropolitan urbanism, including Jane Jacobs’s *Death and Life of Great American Cities* and Rem Koolhaas’ *Delirious New York*.⁷ Both of the two books are antithetical to the doctrines of the orthodox modernist urban planning and delved into the chaos of urban anthropology with the methods of empirical observation (Jane Jacobs) and allegorical narration (Rem Koolhaas). In this light, the urbanism of Hong Kong can be regarded as an important extension of works of such kind.

Hong Kong has evolved a vernacular of congestion, a distinct organization determined by real estate speculation, land shortage, zoning regulations, and public-private collaboration. The resulting urban fabric is a form subject to multiple restrictions. One may be impressed by the urban form of Hong Kong, imbued with hollows, tunnels, corridors, and bridges penetrating into and connecting with towers, decks, and blocks. The interpenetration between the building masses and interior public spaces was prompted by Hong Kong’s adoption of the “privately owned public space” policy. Like New York, urban functions have been ordered in a pattern that could

⁶ Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (New York: Princeton Architectural Press, 1995), Intro.

⁷ Jane Jacobs, *The Death and Life of great American Cities* (New York: Vintage, 1961) and Rem Koolhaas, *Delirious New York* (New York: Oxford University Press, 1978).

multiply the capacity of the city so as to maximally sort and channel different activity patterns. Despite a relatively small urban footprint (273 km², about three quarters of the territory is countryside), this porous urban pattern enables Hong Kong to accommodate a total population of 7 million, plus 600,000 visitors every day.⁸

“Congestion” is a subjective experience which refers to varying physical and social conditions in connection with density (measured and perceived), site coverage, bulk of buildings, and development intensity. “Density” usually refers to residential population density (expressed as the number of dwelling units per acre) in the American planning literature. Density for nonresidential developments is most often calculated as a measurement of floor area ratio (FAR). The FAR, or the gross building area per acre, can also stand for the development intensity (capacity) of activity centers or transit-oriented development areas. Residential population density and FAR can be precisely calculated, yet neither of them is able to identify the perceived density in specific civic centers. In the 1960s, before the new town plan was formally launched, average population density in the urbanized area of Hong Kong was 2,000 to 2,500 persons per acre. The district with the highest residential population was Mong Kok, with nearly 10,000 persons per acre.⁹ This extreme condition was in part due to the loosening regulation of building height in Kowloon in the postwar decades. However, in the MacLehose Era, the conventional city centers of Hong Kong were to a large extent depopulated thanks to the government-funded

⁸ Hong Kong Tourism Commission. <http://www.tourism.gov.hk>

⁹ D. J. Dwyer, ed. *Asian Urbanization: A Hong Kong Casebook* (Hong Kong: Hong Kong University Press, 1971), 11.

new town development in the outlying districts. The process of decentralization from the central city to the new towns persisted into the post-1997 era and was counteracted by a surge of economic integration between the former colony and Mainland China. However, the depopulation of conventional city centers was coupled with larger building bulks with greater FAR because few developments would occur unless there were economic incentives for larger gross floor area (GFA). In terms of the cityscape, the retail podiums of the central city were disproportionally enhanced to meet a new standard for shopping and trading. New shopping centers, such as Langham Place at Mong Kok, iSquare at Tsim Sha Tsui, and Hysan Place at Causeway Bay sprang up and became the architectural expression of a new form of retail culture. Therefore, I would like to argue that perceived density of Hong Kong in the post-1997 era is in a large sense contributed not by the living and working population (residents and jobs), but experientially by the increasing activity intensity and the evolving consumerism.

The “Culture of Congestion,” as a theme in Rem Koolhaas’s *Delirious New York*, specifies a discourse revolving “Manhattanism.”¹⁰ In *Delirious New York*, Koolhaas develops the ideas of

¹⁰ Rem Koolhaas, *Delirious New York: A Retrospective Manifesto for Manhattan* (New York: Monacelli Press, 1978), 10, 152. Rem Koolhaas, “Junkspace,” Chuihua Judy Chung, Jeffrey Inaba et al, eds. *Harvard School of Design Guide to Shopping* (Koln: Taschen, 2002). Chuihua Judy Chung, Jeffrey Inaba, Rem Koolhaas, Sze Tsung Leong eds., *Great Leap Forward* (Koln: Taschen, 2001). Koolhaas writes: “Manhattan’s architecture is a paradigm for the exploration of congestion... It reveals a number of strategies, theorems and breakthroughs that not only give logic and pattern to the city’s past performance, but whose continuing validity is itself an argument for a second coming of Manhattanism, this time as an explicit doctrine that can transcend the island of its origins to claim its place among contemporary urbanisms. With Manhattan as example, this book is a blueprint for a ‘Culture of Congestion’.” His Project on the City in Harvard University was somehow an extension of his study on the city. This project amounted to two volumes: the *Great Leap Forward* and the *Guide to Shopping*. Underlying Koolhaas’ conceptualization of the city is the concept of “Junkspace.” He

“Manhattanism” to profile an ideology of high-density, high-rise urbanity. Koolhaas defines “Manhattanism” as “one urbanistic ideology that has fed hyper-density, without once losing faith in it as the basis for a desirable modern culture.” Skyscrapers became multi-layered shells, with each layer providing optional lifestyles. Kenneth Frampton, in his article “A Note on Manhattanism,” notes that “Manhattanism” presents an “alternative reality of radical potential” and “it is critical of the positivistic constraints of both capitalism and communism.” To Frampton, “Manhattanism” launched a new architectural agenda about the lost images of the city: the 19th Century metropolis, now “dissipated” (Baudelaire and Fourier’s imagination of infinite arcades), or the 20th Century metropolis “aborted at birth” (Moses King’s dreams of New York).¹¹ Koolhaas’ attitude is ambivalent, both critical and passionate. Likewise, Koolhaas’ “Project on the City” attempts to draw attention to the scene of a more primitive and radical modernity (or capitalism). As a part of his view of the city, Koolhaas’ essay “Junkspace” (2001) delves into the contagious form of consumerism. “Junkspace” treats users as the inmates of separate healing programs.¹² Koolhaas views congestion as both a mesmerizing context and a subconscious instinct in the making of the capitalist metropolises (Figs. 4,5).

writes in the essay “Junkspace”: “Architects thought of Junkspace first and named it Megastructure, the final solution to transcend their huge impasse. Like multiple Babels, huge superstructures would last through eternity, teeming with impermanent subsystems that would mutate over time, beyond their control. In Junkspace, the tables are turned: it is subsystems only, without superstructure, orphaned particles in search of framework or pattern. All materialization is provisional: cutting, bending, tearing, coating: construction has acquired a new softness, like tailoring.”

¹¹ Kenneth Frampton, “Two or Three Things I Know about them: A Note on Manhattanism,” *Architectural Design*, Issue 5 (1977).

¹² Rem Koolhaas, “Exodus/1972,” *Architectural Design* (May 1977).

Urban practices driven by quantitative imperatives (especially full employment, housing, public health, and transportation) used to be a recurrent topic in urban planning and architecture in the heyday of Modernism. However, the “issue of quantity” and the conflicts it generated have to a large extent disappeared in the modernist cities. As Marshall Berman remarks, these demographic issues were not resolved, but masked and mystified by social segregation, rational planning, and technologies. For most of the 20th Century, urban spaces have been designed to “ensure that collisions and confrontations will not take place.”¹³ Koolhaas’s recent criticism of Western contemporaries is that they have lost interest in the “central issue of quantity” or the “masses” which had propelled the prewar modernists.¹⁴ Needless to say, Koolhaas presents an alternative agenda aside from Marshall Berman’s pessimistic interpretation of the internal contradiction between order and congestion.¹⁵ Koolhaas proposes a speculative view for architecture to more proactively embrace the potent institutional mutation of reality in the 20th Century metropolises. Nevertheless, Koolhaas’ “Culture of Congestion” loosely referred to a group of concepts, practices, customs, and even ideologies which ought to be further clarified and verified in a specific context. The issue of congestion runs the risk of being reduced to a

¹³ Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (New York: Simon and Schuster, 1982), 164.

¹⁴ Rem Koolhaas, “Singapore, Portrait of a Potemkin Metropolis; Songlines...or Thirty Years of Tabula Rasa,” in *S, M, L, XL*, ed. Rem Koolhaas, Bruce Mau and O.M.A. (New York: The Monacelli Press, 1995), 1009-1089. Koolhaas writes: “What makes these architects exciting-and maybe what makes them Asian – is that they do not avoid, like their European contemporaries, the central issue of quantity – the masses – that had propelled the prewar modernists.”

¹⁵ Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (New York: Simon and Schuster, 1982).

lifestyle and being emptied of its own historical content, a model which can be decomposed into a series of tools and forms to inform the revival of decaying downtowns in the West.

It is noteworthy, especially based on my study on the urban design practices of Hong Kong, that the term “culture” can be an elusive concept when it refers to various social institutions and customs in the production of space. The “Culture of Congestion” is built on a variety of regulatory codes in relation to various programs, uses, and forms. For instance, the extremely high population density of Hong Kong did not naturally generate a vertically integrated urban form. The fact is that Hong Kong in the 1960s and 70s developed a series of land-use control techniques which can influence its urban form. These included the use of Outline Development Plans, Zoning Plans, and more detailed Layout Plans produced by the Hong Kong government. Specifically, the detailed Layout Plans were the product of countless policy and planning decisions. They played a role as a guiding force for shaping the activity centers of new towns, when the opportunities for large-scale development abundantly existed in the tabula rasa. These control drawings regulated the way in which buildings relate to ground and deck levels, lubricating the actualization of an overall urban design vision.

In mid-19th Century Paris, with Haussmann’s rebuilding of the city, the boulevards became an integrated circulation system to channelize the moving crowd. Attached to the system, there were arcades, department stores, panoramas, exhibition halls, opera houses, and a network of semi-public spaces. To Richard Sennett, the expansion of such a pedestrian network posed a new order in the public realm. This sub-divided, well-organized semi-public domain diffused the gathering of a purposeful crowd. The population, mostly strangers, was distributed by new urban forms devoted to specific programs. We might find that Richard Sennett refers to the term

“crowd” in a way that is very different from “density.”¹⁶ On the one hand, “density” (not limited to population density, as previously discussed) is a neutral, static, and measurable variable which describes a great number of people inhabiting a certain area. “High urban density” refers to an urban condition, in which a great number of people live and work in a designated area, without indicating the social or cultural behavior of this state.¹⁷ On the other hand, as opposed to “density,” “crowding” or “a crowd” in Sennett’s text is associated with a tumultuous, socially unstable population, comprised of strangers who are seeking a new identity in a tumultuous era. Sennett generalizes a “theory of crowding” that individuals in the crowd tend to be vicious, but demarcated space can largely appease the “psychotic frenzy” in a crowd.¹⁸ The issue concerning population density poses not only a technical problem of public health,

¹⁶ Richard Sennett, *The Fall of Public Man* (New York: W.W. Norton & Company, 1974), 41-63, 294-301. For Sennett, a crowd or a mass is always related to strangerhood. Paris and London in the 18th Century bore witness to great population growth, mainly contributed by in-migrants from the countryside. Therefore, the word “crowd” could apply to a cluster of population which was “motley, amorphous, questionable and unformed,” and “there seems to be no social order” among the crowd of in-migrants. Thereafter in the 19th Century, with the growth of industrial capitalism, the man at work was detached from his own labor and fellow workers, as well. To erase this strangerhood, an intimate domain took the place of the public domain, and communities were substituted for ghettos. Additionally, Sennett, *Flesh and Stone: the Body and the City in Western Civilization* (New York: W. W. Norton & Company, 1996), 255-281, 317-354. In the chapter “Moving Bodies,” Sennett considers William Harvey’s findings of the circulation of blood and respiration to be a critical moment which marked the formulation of a new master image of the human body and city. Words, such as “artery” and “veins,” started to refer to streets in the 18th Century by urbanists. For instance, Patte used the imagery of arteries and veins to justify the principle of one-way streets, a model based on the blood system of the human body. Thus, similar to the movement of blood and air in the human body, a city was intended to circulate air, water, waste and consumer products. A state of movement in a human settlement should require careful planning, and the city’s health might collapse due to clogged or closed urban fabric of the Middle Ages. In the 19th Century, the street system of Paris and London developed into a set of even profound networks, including squares, gardens, mass transits, thoroughfares, connectors, and the glass-roofed arcades as “urban capillaries.” Thus, as the crowd became a risky, unknown mob, cities started to embrace technologies to protect the human body from the crowd, rather than through a crowd.

¹⁷ Richard Sennett, *The Fall of Public Man*, 12-14, 49-57, 133-135.

¹⁸ *Ibid.*: 300.

social unrest, transportation and in-migration, but also a political one encompassing self-expression, conspicuous consumption, identity conflicts, and needs for comfort. The concept of “crowd” also alludes to Hardt and Negri’s definition of the “multitude” as an “irreducible multiplicity.”¹⁹ In this sense, the unity and multiplicity for a “crowd” are not mutually exclusive. The 20th Century metropolises are machines sorting and protecting citizens from the encroachment of crowds. When Hong Kong planners in 1960s described the tenement houses (Tong Lau) of Yau-Tsim-Mong District as a hazardously congested place, they consciously allude to the fear of the crowd in the 19th Century. The new towns of Hong Kong were initially proposed to classify the industrial population of Hong Kong into single-class, industrial-oriented towns, such as Tsuen Wan and Kwun Tong. New town centers and integrated transportation hubs were built to filter the crowd into different travel patterns and programs. Thus, the study of Hong Kong Section can be partly equated with a study of the form of crowding in Hong Kong.

¹⁹ Michael Hardt and Antonio Negri, *Multitude: War and Democracy in the Age of Empire* (New York: Penguin Books, 2005), 103-115. Hardt and Negri notes: “the singular social differences that constitute the multitude must always be expressed and can never be flattened into sameness, unity, identity, or indifference...in our postmodern social life old identities have broken apart.”

and contradiction.”²⁰ The major contradiction of Hong Kong lies in its role as an *ad hoc* portal city. Traditionally, Hong Kong was a temporary refugee for the hinterland of China suffering hunger and poverty. For a long period of time before the MacLehose Era, few Europeans believed that Hong Kong would deserve a long-term comprehensive city plan. Its growth was once centered on the Victoria Harbor so as to avoid excessive daily movement of people and goods within its territory.²¹ Another reason for Hong Kong’s compact city footprint is that the under-developed New Territories was regarded as buffer zones between Mainland China and the colonial city instead of opportunities for development. The 1976 Country Parks Ordinance was enacted to preserve the natural habitat and to encourage maximum development of sites which reinforced the urban patterns of compactness. Both commercial and residential developments were reduced to uniform and fundamental necessities. Moreover, they were built as self-contained, fully integrated “estates” (“Sun Chuen” or the modern settlements) or “complexes” (business district). These “estates” and “complexes” rested on podiums linked by elevated and covered pedestrian links which provide easy access to and from metro stations, bus terminuses, and other communal amenities. Simultaneously, these podiums were treed and landscaped to bring pastoral elements to spaces in between the concrete towers.

One might conclude that the integrated urban form of Hong Kong evolved for reasons

²⁰ Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (New York: Simon and Schuster, 1982), Preface.

²¹ Jon A. Prescott, “Hong Kong: The Form and Significance of a High-Density Urban Development,” in Dwyer, D.J., ed. *Asian Urbanization: A Hong Kong Casebook* (Hong Kong: Hong Kong University Press, 1971), 11-19.

disconnected with any form of architectural idealism. However, even if there has not been an independently operating agent in charge of the guidance of urban design for postwar Hong Kong, there has always been a rigid institutional and managerial machine in Hong Kong which is able to embed the urban ideals in the day-to-day operation of the city. One instance is that the statutory plan system was a critical force in specifying land use functions and building form control which would be consistent with an overall plan. As discussed in the previous section, the podium-tower prototype is the key to cohere physical forms and the experience of modernity in Hong Kong. However, the podium is not a local invention in Hong Kong, but originated in post-war Britain when modernist planners imagined a multi-decked city with cars running on the ground under continuous pedestrian podiums. The Hong Kong government as a managerial system for the Crown Colony was more prone to established planning principles in Britain than the particulars of local consumer culture, although the latter eventually assumed a position to align itself with the ready-made urban models of postwar Britain.

In adopting these planning concepts, Hong Kong successfully accepted a large agrarian-based immigrant population and converted the squatters in the 1950s and 60s into new high-rise estates. Urbanist Jon A. Prescott optimistically remarked in *Asian Urbanization: A Hong Kong Casebook* that the high density living in Hong Kong exhibited a revolutionary potential not only for Asia, but for the world. Prescott applauded the urban plan provided by the 1967 *Hong Kong Mass Transport Study*, which proposed a new urban structure for high-density living. With this

“viable” scheme, future cities would rest on interchange metro stations, with “multi-grade separation of services, vehicles and pedestrians and the establishment of townscapes where human beings take the advantage of the technology of the age.”²² In 1970, in contrast to the sprawling cities in the United States, only 7 percent of Hong Kong residents owned private vehicles. To Prescott, Hong Kong is able to achieve a goal of increasing living standards alongside maintaining high population density (Figs. 6, 7).

Notably, this modernity of Hong Kong should be studied in relation to four internal paradoxes in Asia’s modernization: 1) interaction between “deterritorializing” and “reterritorializing”; 2) the interdependence between urbanity and mobility; 3) the paradox between collectivism and individualism; and 4) the disparity between local reality and western principles. These conditions cover a broad range of respects concerning the specific social and cultural context of East Asia.

First, a single narrative of the modernity for the entire East Asia is problematic, regarding the fragmental pattern within this enormous region. Nonetheless, in his *East Asia Modern*, Peter G. Rowe attempts to build a general view of East Asia modernity (after World War II) on the mutual reaction of “deterritorializing” and “reterritorializing.”²³ Rowe put forward three

²² Ibid. Prescott believed that the transit oriented development “is the right sort of solution to create the needed anatomical framework for the city,” and this solution would be economically feasible because of the high density.

²³ Peter G. Rowe, *East Asia Modern* (London: Reaktion Books, 2005), 171. Rowe notes that one way of viewing the spatial effects of the passage of time, collective experiences, and resulting outlook towards city buildings is to consider them as aspects of a process of urban territorialization involving the simultaneous presences of deterritorializing and reterritorializing phenomena, based on the terminology from Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London, 1987), 37-68. Rowe notes,

spatial-temporal movements in relation to this reaction: 1) expansion; 2) intensification; 3) and deconcentration. In light of Rowe's work, East Asian studies should attend to those historical shifts which exerted a regional impact and the resultant spatial implications. These shifts occurred in the reforms and revolutions, changes in power relations, and progress of technologies. Thus, in the case of Hong Kong and the entire East Asia, the most recent shift concerning "deterritorializing" and "reterritorializing" emanated from the Chinese Civil War (1946-1949) and the Korean War (1950-1953), as well as their aftershocks in economic geography and regional politics. Postwar Hong Kong urban history can be understood as a set of spatial responses to the changing politics across the Shenzhen River. What can be generalized from the modernization of the four tigers (Hong Kong, Singapore, Taiwan, South Korea) is intimately related to the changing geopolitics in East Asia, especially China before its 1978 Reform. The advent of the modernization of Hong Kong was also seen as an outcome of a series of crises and responses after World War II.²⁴ The interaction between the social crises and spatial responses defines the spatial and historical context in which further discussion is situated.

"Under this rubric, effective deterritorialization occurs at moments when enough pressure is brought to bear on the existing territorial order so as to eliminate existing distinctions, socio-political power relations, or ways of doing things, to the extent that aspects of the prior regime collapse on the way to becoming something else. Reterritorialization is the process that takes up in new and different ways, with the elimination of prior distinctions, relations, ways of doing things or with the forces behind them, resulting in a different territorial order, and so the process of urban territorialization continues to unfold."

²⁴ These crises and responses include: the Chinese Civil War between the Kuomintang and Mao's Communist Party before 1949, the Chinese Diaspora due to famine in the 1950s and 60s, the She Kip Mei Fire and the public housing program by Hong Kong colonial government in the 1970s, and Hong Kong's reintegration into the Pearl River Delta after China's opening up in 1978, the transfer of the sovereignty over Hong Kong back to China, and finally the economic restructuring after the Asian financial crisis in 1998.

Second, the urbanization of Hong Kong and the Pearl River Delta share some common experiences with the urban growth of Western capitalist metropolises in the 19th and 20th Centuries regarding densification of transportation infrastructure and the rise of consumerism. One assumption underlying modernity as a general concept is that the modern city is a derivative of enhanced mobility and circulation. For instance, Hong Kong was conventionally composed of two linear clusters: the east-west “City of Victoria” on the north shore of Hong Kong Island, and the north-south Yau-Tsim-Mong District along Nathan Road in Kowloon. Such an urban pattern is reminiscent of Spanish planner Arturo Soria y Mata’s project *Ciudad Lineal* (1888), a 30-mile-long city built along a Madrid tramline. The linearity of Hong Kong did not naturally dissipate because of the decentralization of the metropolitan districts to the outlying suburbs. On the contrary, with further integration between Hong Kong and Mainland China, this linearity extends to Shenzhen and the entire Pearl River Delta, thanks to the fruition of transportation and managerial infrastructure. By and large, the linearity represents the generative mechanism of the modern city and its deep structure which has been incorporated into the city sections across major axes of growth.

Third, the foremost cultural character underlying modernity in East Asia is collectivism. East Asian collectivism can be explained in two mutually connected ways. First, the theory of “developmental state” and “collective consumption,” elaborated and articulated by Manuel Castells in *The Shek Kip Mei Syndrome*, reveals the logic underlying the spatial production of

Hong Kong and the four tigers.²⁵ State governments of East Asia have played a strategic role in directing social resources to a few sectors that exert comparative advantages in a global market. Second, the “collective” not only alludes to political and economic behavior, but also a cultural trait. Specifically, this collectivism was rooted in the Confucian tradition as well as the socialist ideals in welfare capitalism which were imposed on Hong Kong and Singapore in the 1960s, although neither of them officially admitted the socialist constituents in their urban planning practice.

Fourth, the position of Western paradigms in East Asian modernization continues to be an unresolved issue. However, the impression of modernism was a collaged and propagated image in the early stage of East Asia’s modernization.²⁶ Peter G. Rowe argues that the modernity (or post-modernity) of East Asia should be depicted in languages distinguishing “differences of

²⁵ See Manuel Castells & Yin Wang Kwok, *The Shek Kip Mei Syndrome: Economic Development and Public Housing in Hong Kong and Singapore* (London: Pion Limited, 1999). Also see Ziya Öniş. “The Logic of the Developmental State.” *Comparative Politics* 24, no. 1 (October 1991): 109-26. In Castells’s narrative of the Hong Kong and Singapore public housing program, Asian states have played a strategic role in taming domestic and international market forces, and harnessing them to favor industrialization rather than market rationality. In other words, since the state subsidized housing and infrastructure, which had a great impact on factor prices and comparative advantages in the global market, Asian modernization is not a purely rational process.

²⁶ Former Singapore leader Lee Kuan Yew’s talk about the Asian city of tomorrow is representative of such a collaged impression of modernization: “imagine a city where we have dwellings that stretch upwards towards the sky, and beneath them people humming with activity in the business houses, governmental offices, educational centres, theaters, open spaces, and recreational centers...where the various centers of activity are linked up... centers of entertainment and culture in the heart of the city that light up in the evening...Imagine clean parks and roads free from scores of hawkers and street vendors, and open drains unlit. This is our Asian city of tomorrow.” Quoted by Rem Koolhaas in Rem Koolhaas, “Singapore, Portraint of a Potemkin Metropolis; Songlines...or Thirty Years of Tabula Rasa,” in *S, M, L, XL.*, ed. Rem Koolhaas, *Bruce Mau and O.M.A.* (New York: The Monacelli Press, 1995), 1009-1089.

kind” from “differences of degree.”²⁷ With that in mind, although some East Asian regions comply with the general concepts of modernization in terms of measurable international standards, in actual fact, these regions have been very speculative in adopting Western traits and values. Meanwhile, collectivism, consensus and the interests of relations, clans, companies, and other social entities were often privileged over a rational, public doctrine. Due to the entrenched paradox between the local reality and Western models, the architectural discourse of East Asia lacks general rules for the practice of urban design. The knowledge of modern urbanism was originally introduced by outsiders, and Western models were adopted in a fashion of expediency. In post-war Hong Kong, such outsiders were technocrats and architects educated in Britain and other Western countries. Hong Kong planners developed a pragmatic attitude of seeing form and style as a neutral element detachable from the standardized and reductionist building shells. This attitude, in some senses reminiscent of Koolhaas’s pragmatic “Manhattanism”, dominated the way in which zoning and building regulation corresponds to the market target. This pragmatism

²⁷ Peter G. Rowe, *East Asia Modern* (London: Reaktion Books, 2005), 9, 129, 191-195. “East Asia” throughout this text refers to China (including Hong Kong and Macau), Taiwan, Japan, Korea, and Singapore. Rowe raises a few questions regarding the modernity of East Asia. “First, how well, in fact, do cities in this region conform to concepts of modernization to be found elsewhere in the world and particularly in the developed West? Second, to what extent might they also collectively describe a regional urban modernity that is different in kind, as well as degree, from other modern cities?” In East Asia, the introduction of modern planning strategies, land-use zoning legislation, building codes, and public improvements have emulated or paralleled those of the West. However, such an achievement was usually related to state-owned enterprises (China and Singapore) or conglomerates (Korea, Hong Kong, and Taiwan). Many of the phenomena discussed in the whole thesis is not unique to Hong Kong or East Asia, but when they become “overwhelmingly prevalent conditions of urban living,” differences in kind replace differences of degree. Thus, the significance of the so-named “modernity of East Asia” relies on the discovery of fundamental characteristics which distinguish East Asia from other regions in the world, although these characteristics might appear merely in terms of quantitative distinctions.

created forms which would otherwise be seen as abnormal or inhuman in the West.²⁸

In the late MacLehose Era, being increasingly aware of the city's unique economic and geographic position, public literature of Hong Kong began to identify the city as an autocratic city-state, a model for Asian modernity. At the same time, the passion of British modernism was dampened by Conservatives' new policy for privatizing state-funded programs, such as the new town developments. Alongside the ebbing of the New Town Movement was the dissipating aesthetics of New Brutalism. Ironically, Hong Kong started to develop its own architectural and planning vocabulary by adopting concepts borrowed from British modernism. The knowledge about modernist urbanism was further brought to the public discourse, as well as building codes and planning regulations. In that sense, the following discussions will be built around a comprehensive review of local planning and architectural literature, which reflects a more authentic and relevant knowledge of Hong Kong modernization (Figs. 8, 9).

²⁸ Peter G. Rowe, *East Asia Modern* (London: Reaktion Books, 2005), 38. Peter G. Rowe remarks: "Styles are often misappropriated out of context in an unknowing and indiscriminate fashion. Traditional or local ways of building... are usually so thoroughly outstripped by the scale, complexity and programme of what has to be done as to render them of little apparent help."

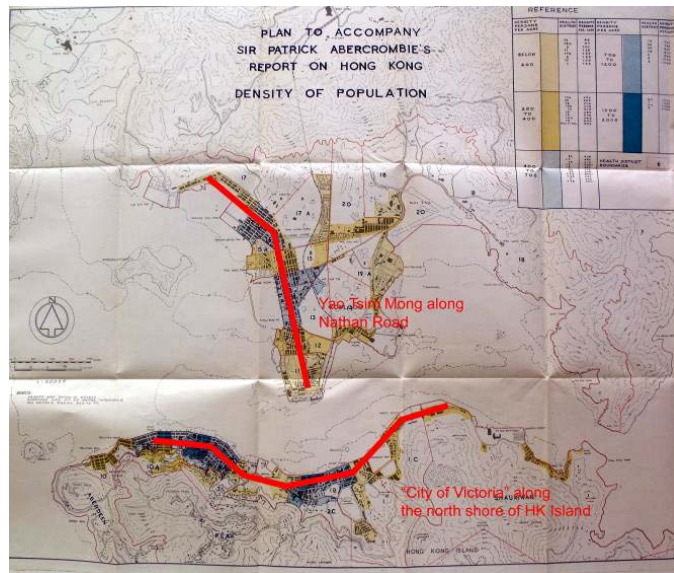


Figure 8. The development corridors of Hong Kong in the mid-20th Century. Source, *Abercrombie Report*, 1948. Figure 9. Map of the Pearl River Delta.

4. Chapter Outline

The research roughly covers a historical period from the Shek Kip Mei Fire in 1953 to the breakout of SARS in 2003. Furthermore, the MacLehose Era (1971-1982) is a period in which Hong Kong expanded from a harbor city to a real “territory”, and few Hong Kong research can neglect its significance in the urban history of Hong Kong. This dissertation is no exception. The growing breadth of the territory, with its people’s changing travel patterns, contributed to the complexity of the urban circulation and the stratification of the city centers. Hong Kong features an environment of entrepreneurial freedom and a passive regulatory frame with minimum state intervention. Private development industry is active in the political, financial, and communal institutions. Hence, the purpose of this dissertation is to argue that the foremost force driving the vertically integrated developments of Hong Kong was the embedded urban ideals within the day-to-day building and planning practice in Hong Kong. It examines the unresolved puzzle of

why a city with minimum governmental intervention could motivate social resources to achieve large-scale urban restructuring.

Chapter 2 examines the terminologies and ideas pertaining to the city's sectional condition in the established scholarship on landscape urbanism, mobility, and public space. These terminologies must be critically assessed and applied to a historical trajectory of urban topographical transformation in Hong Kong and East Asia. The built environment of Hong Kong, in this case, serves as not only an alternative reality, but a test ground to compose a more general narrative of modernism and modernity. The remainder of this dissertation focuses on Hong Kong as a case study to illustrate the concept of "sectional city" and its appearance in East Asia.

Chapter 3 reviews the urbanism of Hong Kong as an evolving intellectual construct. It searches Hong Kong planning archives in the late colonial period (1945-1997) for synergy between the postwar British urbanism and the planning practice of Hong Kong. One theory that is often cited is that Hong Kong is a model of *laissez faire* policy. In response to this conjecture, which has increasingly appeared to be problematic at least in the urbanistic realm, this chapter revisits the rich discursive history underlying the spatial restructuring of Hong Kong around the 1970s. The debate over the density, infrastructure, and mobility of Hong Kong is indicative of a local urban consciousness which was roughly formed in the 1970s. An assumption throughout this chapter is that the built environment of Hong Kong and its postwar urbanization is by and large an *ad hoc* arrangement aiming to solve the housing needs and real estate market incentives. Hong Kong is

seen as a microcosm of Pacific Asia, and its postwar modernization (1945-1997) is somehow a derivative of the “refugee mentality.”²⁹

Chapters 4 and 5 are two independent projects which inspect two sorts of spaces and city sections: the first about the multi-level pedestrian networks; the second about the vertical consumer spaces. The two projects address two sorts of urbanities in relation to the deepening entanglement between urban circulation and consumerism. They focus on two types of sectional cities: one by administration, the other one by representation. They define a historical trajectory from the urban restructuring in the 1970s driven by the developing consciousness of Hong Kong’s own character and urban identity, to a postmodern spatial shift in the 1990s and in the new century. Chapter 4 sees the vertically integrated city as a device for sorting, managing, and channeling a crowd. Covering a period of history from the 1960s to the late 1990s, this chapter studies the multi-level pedestrian network in Hong Kong, which was first built in Central in the 1970s as a continuous pedestrian precinct. Congestion was a serious issue to be resolved through grade-separation and pedestrian channeling. Walking was considered either as an activity to be protected from car traffic, or one to be manipulated and commoditized. Hong Kong began to form a networked pedestrian space centering on the catchment areas of public transit. Hence, the

²⁹ George C.S. Lin, "Hong Kong and the Globalisation of the Chinese Diaspora: A Geographical Perspective." *Asian Pacific Review* 43, no. 1 (2002): 63-91. Also Gordon Mathews, Eric Kit-wai Ma, and Tai-lok Lui, *Hong Kong, China: Learning to Belong to a Nation* (New York: Routledge, 2008), 15-29. Hong Kong was bordered by a vast home land. Due to the incessant political turmoil in China, immigrants through unknown channels poured into Hong Kong from 1949 to the late 1970s, immediately before the opening up. The political stability in Hong Kong was preferable to political instability in China. In such a situation, money and family become the most trusted factors. Thus, by the 1970s and 1980s, as Chapter 3 explores, this refugee mentality had become transmuted into a market mentality, based not on survival, but on choice.

public space in private developments is more or less a calculated provision of gift provided by the business owners in exchange for the incentives given by the planning sector. Lastly, the knowledge and visions about a pedestrian-only environment was gradually translated into planning regulations and administrative urban design control practices. This regulatory environment offers a new perspective for architectural criticism and urban studies to reexamine the relationship between architectural and the day-to-day administrative practice.

Chapter 5 tackles a new urbanism in relation to the vertical retail spaces in Hong Kong. From the 1990s, with more intimate integration between the urban infrastructure and consumer space, Hong Kong's vertical spatial ordering began to assume a new form. Communal space was further condensed in enormous interior spaces. This new form seeks to resolve the internal contradiction of consumer spaces as both a display of commodities and as a space of circulation. Taking Jerde's practice in Hong Kong as a case study, this chapter probes and critiques the spatial and architectural implications of Jerde Partnership's place-making. The discussion is built on the works of Walter Benjamin (on arcades and panoramas), Fredric Jameson (on the Westin Bonaventure Hotel), and Margaret Crawford (on shopping malls). The paper argues that the concept of Italian "hill town," as the underlying prototype for Jerde's design philosophy provides an alternative form for proximity and creates new a topographical framework for high-density cities.

The conclusion reviews the major findings extracted from the former chapters and seeks to build a generalized narrative about the social, spatial and historical condition sustaining the urban form of Hong Kong. The approaches and technologies underlying the vertical integration can boil down to a few recipes. Yet these recipes should be critically examined in the specific context of

Hong Kong. The concluding statements demonstrate a few ways in which the study of Hong Kong can illuminate the overall disciplinary framework of architecture and urbanism.

Chapter 2. Proto Hong Kong Section:

Representation, Topography, Mobility and Space

This chapter positions the concept of *Hong Kong Section* against a broader historical background in relation with established scholarships, which include studies on the history of building and city sections (Evans, Ackerman, Suisman), on mat urbanism as a new urban topography (Maki, Smithsons, Allen), on mobilities and modernist urbanism (Buchanan, Berman, Urry, Frisby), and lastly on the loss of public spaces (Benjamin, Sorkin, Sennett). These thoughts and discussions, respectively, belong to a multitude of fields, yet have the potential to cohere to each other because they share a common assumption that proximity of spaces has institutional implications. These separate discourses are apparently oriented to architects' constant interest in a new order of urban forms as a response to high-density living. Lastly, the historical review concludes with an analytical perspective to probe into the anatomical framework of Hong Kong.

The chapter also attempts to include recent scholars' reflections on East Asian urbanity. However, current scholarly works on East Asia from a disciplinary perspective are comparatively insufficient. It was not until 2000 or so that scholarly works on the spatial character of East Asia were globally acknowledged as a research field that is independent of general Asian urban studies. Koolhaas' *Great Leap Forward* (2001) and Peter G. Rowe's *East Asia Modern* (2005) are amongst the earliest examples of this tendency. Thus, the last section of this chapter will briefly survey the existing scholarship on East Asia in general (not limited to density and related spatial experience) and suggest perspectives from which the urbanism of Hong Kong can intersect with the existing literature.

1. Representation: Anatomy of the City

In 1967, a British firm (Freeman, Fox, Wilbur Smith and Associates) was commissioned to present a solution for the Hong Kong's traffic issues. The report, titled *Hong Kong Mass Transport Study* suggested a city oriented by mass transport development and a townscape with multi-grade separation of services, vehicles, and pedestrians. Such a vision belongs to a series of attempts to build a vertically integrated city for the past centuries. The evolving pattern of the street sections reflects architects inexhaustible fascination with new orders of urban forms, in terms of the parts, the whole and the organization in relation to movement. Making sections reflects a fundamental epistemological fashion for the ordering of forms. The making of building sections, which originated from the craftsmanship of naval architecture, is a practice both analytical and synthetic. The building of a vessel primarily comprises the making of spines and ribs; whereas, the street section and city section are composed of movements (longitudinal sections) and clusters (cross-sections). On the one hand, the evolution of building and street sections reflects an invisible world of internal machinery of the built environment. On the other hand, a city section reveals a segmental urban scenario which has the potential to be proliferated and assembled into entire dynamics of the city. Both the modernists in 19th Century Paris and 20th Century New York developed their distinctive variations of streets: arcades, department stores, train stations as terminal cities, lineal cities, and shopping malls. Hence, the evolving street section provides a window to speculate about the changing physiognomics of high-density

cities.³⁰

The sectional drawing as an innovation can be dated back to the Reims workshop in 1220. Peter Parler's section for the Prague Cathedral in the 14th Century is the earliest known example.³¹

According to Jacques Guillerme and H el ene V erin, the making of sectional representations stemmed from a growing attention to Roman ruins in the age of the Renaissance. The decay of Roman and Medieval monuments brought to light the internal structure of a once complete edifice.³² In Daniele Barbaro's translation of Vitruvius' *De architectura* in 1567, the term *profilo* started to denote the modern meaning of "section."³³ Barbaro referred to *profilo* as a cut feature in architecture which involved some form of physical removal. With the assistance of drafting sections as both an analytical process and a method of representation, the depth of walls and projection of every element could be brought to light. Moreover, the architect, like a physician, could simultaneously show all of the interior and exterior parts of a structure. Yet, the meaning of sections in the 16th Century cannot be reduced to a neutral, scientific projective cast, but a way of reasoning and thinking, either synthetic or analytic, in which a sequential action was

³⁰ Tiedemann, Rolf. "Dialectics at a Standstill: Approaches to the Passagen-Werk." In *The Arcades Project* (Cambridge, MA and London: The Belknap Press of Harvard University Press, 1999).

³¹ James S. Ackerman, *Origins, Imitation, Conventions: Representation in the Visual Arts* (Cambridge, MA: The MIT Press, 2002), 298.

³² Jacques Guillerme and H el ene V erin, "The Archaeology of Section," *Perspecta* (1989), Vol. 25, pp. 226-257.

³³ Manuela Antoniu, "Fugitives in Sight: Section and Horizon in Andreas Vesalius's *De Humani Corporis Fabrica*," in *Chora 5: Intervals in the Philosophy of Architecture*, eds. Alberto P erez-G omez et al (Montreal: McGill-Queen's University Press, 2007), p.8.

involved. The section unified the trilogy of practice, representation, and perception.³⁴

The history of sectional drawings intimately relates to naval architecture.³⁵ The longitudinal sections and cross-sections drawn by carpenters, respectively, define the spine and ribs of a hull, and rationalize the construction practice. Both the longitudinal section and the cross-section cut through the cardinal directions of a cathedral. Like the section for a vessel, the longitudinal section implies the major direction of movement in a building. The cross-section defines a typical configuration of space segments. The horizontal plan of a vessel is a special section because it also regularizes the profile of the ship's hull. Remarkably, the term "nave," or the Latin *navis*, means "a vessel." This suggests a shared structure between the building architecture and naval architecture. Making sections consists of two opposite intellectual processes—the synthetic and the analytic. The two processes correspond to the two ways in which the spaces are

³⁴ Jacques Guillerme and H el ene V erin, "The Archaeology of Section," *Perspecta* (1989), Vol. 25, pp. 226-257. It is probably not until the end of that century that one finds a clear identification between sciographie and profil, in Ozanam, who defines the latter as the geometric and orthographic elevation that lets one see the inside of a building. Essentially, in civil architecture, the term "coupe" designates the area of a portion of an edifice, already built or yet to be built, by means of a vertical plane between the outlines of which the interior elevation is represented. doctrinarians of the so-called "neo-classical" period as Quatremgre de Quincy and, to an even greater degree, J. N. L. Durand, professor of architecture at the Ecole Polytechnique, who militantly fought for a severe economy of graphic practices and a rationalization of the process of conception. This method favored the section for the deduction of the elevations of facades and their correlation with the plan. In so doing, he was only providing the means for an enlightened functionalism which matched, combined, and arranged the required functions of an edifice, outlined their volumetric dispositions, and subordinated therefore all. In this regard, the project for the cenotaph of La P rouse by Labrouste is exemplary of, as it shows, all at once, how a section design can be a means of controlling compositions and an occasion for aestheticizing the rendering of the project. The section brings to light properties of the composition that would otherwise remain unnoticed upon first consideration of the constructed monument. Furthermore, the section is, by its very essence, a sort of contractual document which the architect addresses to the commissioner and to the contractor.

³⁵ Ibid. 240.

assembled or partitioned.³⁶ While the sections of carpenters are synthetic because they imply how the hull is assembled, the sectional drawings of architects are analytical because they start from the whole to the parts. Following this logic, the formation of arcades, as a special indoor street, is a synthetic rather than analytical process. Arcades represent a generic architectural model and, at the same time, an urban model in which a typical city section can evolve into a continuous space along a passageway (Fig. 1).

³⁶ Jacques Guillerme, Hélène Vérin, and Stephen Sartarelli, “The Archaeology of Section,” *Perspecta* (1989), Vol. 25, 226-257. The history of making sectional drawings is very much related to the naval architecture in the age of the Renaissance and Early Enlightenment. Guillerme et al. writes: “For the builder, the section is a material work instrument: the template, a wooden mold or millboard pattern, full-size; the plan is only a means of practical control. Conversely, for the architect, the section is only a ‘plan in section,’ a projection onto a plane that might easily be that of paper: the projection of one section, then quickly of several sections, and soon of all the transverse sections...The architect’s plan in section is an analytic process that starts from the whole to get to the parts. For the master carpenter, producing the section (the template) and then the plan (the checking method) is a synthetic process.”

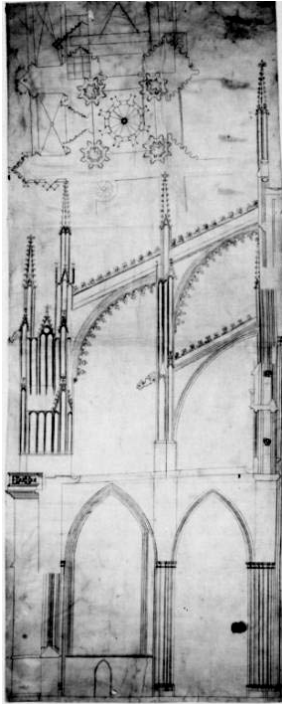


Figure 1. Peter Parler's section for the Prague Cathedral in the 14th Century is the earliest known example of building sections. Source: James S. Ackerman, *Origins, Imitation, Conventions: Representation in the Visual Arts* (Cambridge, MA: The MIT Press, 2002), 298.

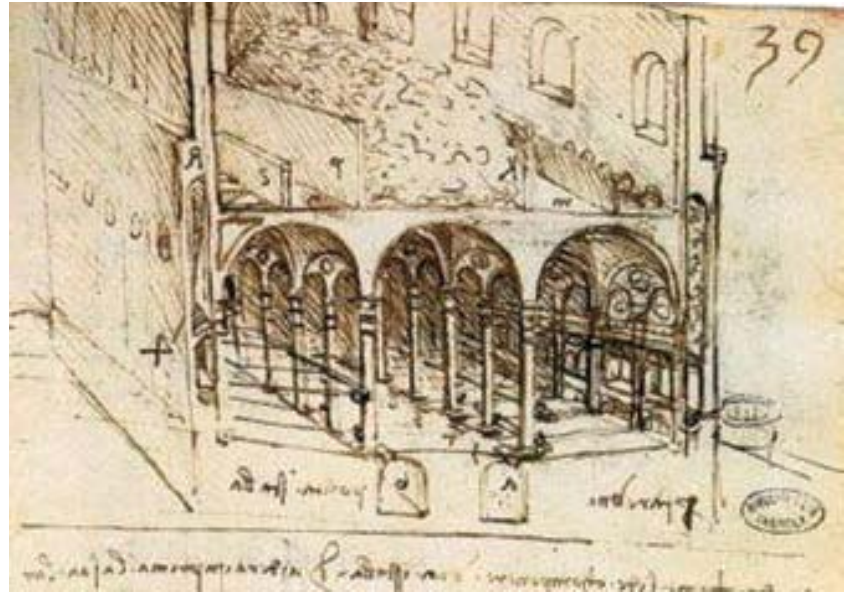


Figure 2. Leonardo da Vinci's sketches of Romorantin, showing the integration between the city and the mechanical system and infrastructure. Source: Karel Vereycken, "Romorantin: Leonardo Da Vinci Imagines the First Modern City," *Executive Intelligence Review*, August 2010, 53-55.

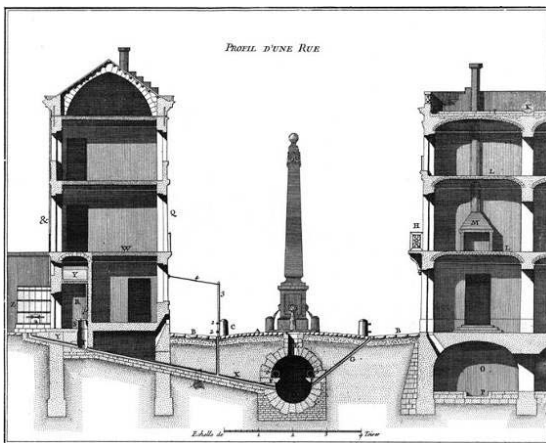


Figure 3. "Profil d'une rue": Pierre Patte's street section. Source: Andrew J. Tallon, "The Portuguese Precedent for Pierre Patte's Street Section," *Journal of the Society of Architectural Historians* 63, no. 3 (2004): 370-77.

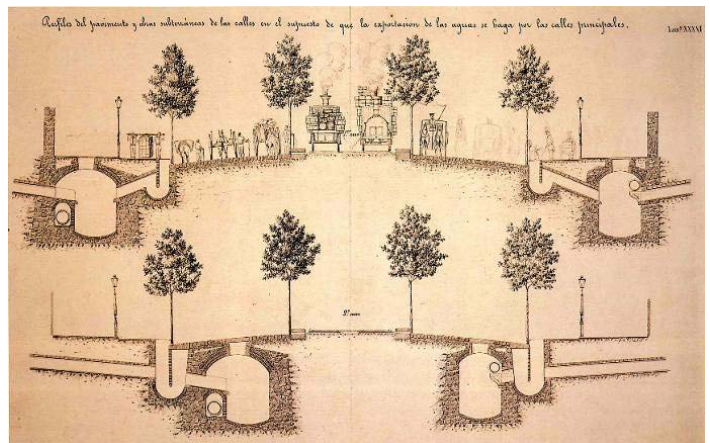


Figure 4. Cerda's street sections showing the organization of footways, carriageways, substructure, and the width and height of neighboring building facades. Source: Ildefons Cerdà, *The Five Bases of the General Theory of Urbanization*, trans. Bernard Miller & Mary Fons i Fleming (Barcelona & Madrid: Electa, 1999).

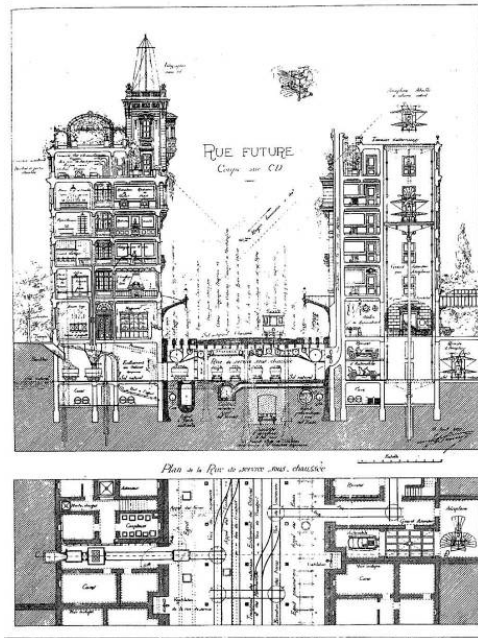


FIG. 2.

Figure 5. Eugene Henard report to RIBA, sectional drawings of a multi-decked future city, 1910.

Source: John W. Reps, "The Cities of the Future." Department of City and Regional Planning, Cornell University, Ithaca, <http://urbanplanning.library.cornell.edu>.



Figure 6. The frontispiece of *Moses King's Dream of New York* (1908).

Congestion and its related public health crises puzzled London, Paris and New York for centuries, and posed social issues which were expected to be addressed by a new anatomical framework of the city. A multilevel city for different modes of urban logistics seemed attractive, but unreasonable because the cost required to build, improve or maintain the infrastructure for this multilevel city is unaffordable for the public sector. However, urban utopias of the multilevel cities, usually represented in sections, have been formulated throughout the 19th Century urban

history. The earliest example of a multi-decked city is Leonardo da Vinci's Romorantin. In 1516, Leonardo da Vinci was called by French King François I to design a new city as the capital of the kingdom at Romorantin on the Sauldre River.³⁷ With this commission, he got a chance to propose a utopian city with elevated walkways over the service streets and canals. He proposed three levels for the ideal city. The lowest level was comprised of a network of canals, which was the primary circulation network. The intermediate level would have roads for travelers and common people, and cater to functional circulation. The upper level was intended for the gentry with palaces, colonnaded walkways, and gardens (Fig. 2).

Application of cross-sections to urban planning dates back to the modernization of city streets in the 18th and 19th Century. The cross-section was first used by Portuguese engineer Eugenio dos Santos to illustrate the management of buildings, mechanical systems, and infrastructure in a single sectional drawing.³⁸ It was not until the French architect Pierre Patte's rendering of a street section in 1769 that a rational solution to manage the substructure, carriageways, and sidewalks was brought to the public's vision.³⁹ Pierre Patte was involved in a network of

³⁷ Karel Vereycken, "Romorantin: Leonardo Da Vinci Imagines the First Modern City," *Executive Intelligence Review*, August 2010, 53-55. Also see Trevor Boddy, "Underground and Overhead: Building the Analogous City," in *Variations on a Theme Park: The New American City and the End of Public Space*, ed. Michael Sorkin (New York: Hill and Wang), 123-153.

³⁸ Andrew J. Tallon, "The Portuguese Precedent for Pierre Patte's Street Section," *Journal of the Society of Architectural Historians* 63, no. 3 (2004): 370-77. Tallon concluded that Patte's reputation as a theorist is based less on the "section" than on what he used it to illustrate: a utopian vision of a "street machine," a full-service tender to the needs of the buildings above. In addition, Patte should be positioned in the historical context that there were a real international network of savants interested in solving the problems of the urban street together.

³⁹ Antoine Picon, *French Architects and Engineers in the Age of Enlightenment*, Trans. Martin Thom

European engineers who saw the city as a rational working system. Pierre Patte's street section also illuminated Baron Haussmann's radical reorganization of the infrastructure of Paris. Moreover, in Patte's street section, the social division of a city, represented respectively by its hierarchy in a vertical dimension, was embodied in the spatial organization of separately functioning logistic systems: pedestrian, water supply and waste, carriageways, and utility systems within buildings. Thus, the street section was not only an "internal elevation," but it prefigured a scenario of collective activities and events in a spatial setting.⁴⁰ The engineering of the street system that Patte proposed is analogous to the logic of naval architecture. Therefore, a whole street, like the hull of a vessel, can be engendered in succession with cumulative sections along the longitudinal direction of the street, which makes up the "ribs" and the "spines," and resultantly the entire "skeleton" of the street.⁴¹ However, compared to that of Eugenio dos Santos, Patte's street section was expressive rather than analytical or synthetic. It prefigures a futuristic city built of generic rules. Yet, such rules were based on a fictional scenario. A century later, in the mid-19th Century, Spanish engineer and planner Cerda succeeded in listing all possible street sections in terms of the organization of footways, carriageways, substructure,

(Cambridge: Cambridge University Press, 1992), 198.

⁴⁰ Robin Evans, *The Projective Cast*, 118. Robin Evans wrote: "Sections... is certainly not what Raphael meant by 'internal elevation.' The architectural section breaks open contained spaces in order to show it as an elevation, forcing entry and revealing the interior to the distanced eye of the architect." Thus, a typical orthographic section ends up as two sets of drawings synthesized into one: a profile of a cut and the space which lies beyond.

⁴¹ In discussing the two sections (longitudinal and cross-sections) as a chief controlling profiles in building a vessel, Robin Evans wrote: "A section is the shape that must be assumed by the combination of parts that make up the "spine" and the "ribs" of the ship, its "skeleton": that is to say, the ensemble of keel, stem and stern, in the longitudinal section, and floor timbers, stanchions and futtocks in the transverse section." Therefore the use of sections reformulated the planning of the street into a synthetic process.

width and height of neighboring building facades, analyzing the pros and cons of each, both from a functional perspective and in terms of its execution and maintenance. The street sections of Santos, Patte, and Cerda uncovered a new dimension for radical urbanists in the 19th Century and early 20th Century⁴² (Figs. 3, 4).

Starting from the late 19th Century, the street section became the media in which futuristic visions of the city were incubated. In the late 19th Century, the Parisian architect Eugene Henard proposed the first modern roundabout (one-way circulation around a central island) to guide the surging carriage traffic. Remarkably, in his plan, this roundabout was centered on an open-air sunken square for underground pedestrian crossings.⁴³ In 1910, Eugene Henard reported his

⁴² Ildefons Cerdà, *The Five Bases of the General Theory of Urbanization*, trans. Bernard Miller & Mary Fons i Fleming (Barcelona & Madrid: Electa, 1999), 145. Cerdà invented the term urbanización, in 1860-61, a term subsequently adopted in other European languages. His treatise *General Theory of Urbanization* was the first theory in modern times to focus methodically upon the city as a construction, its evolution, and the working and interaction of its constituent parts. Until well into the 19th Century, most streets lacked footways and drained off their rainwater via a central surface channel. It became commonplace only in the 19th Century when vehicle traffic increased markedly and construction of sewer networks began. To prevent carriages travelling in opposite directions leaning towards the centre of the road and hitting or grazing each other, a street was shifted from a concave to a convex cross-section. The convex section, in turn, required disposal of rainwater not along the centre as previously, but along the sides. Curbs were more commonly installed, with gutters connecting to the drains, and the remaining space between facade and curb was assigned to footways (sidewalks), protecting pedestrians from wheeled traffic. In Spain in the mid-19th Century, building raised footways separated from the carriageway which had not yet become widespread, Cerdà developed a list of all the possible cross-sections, then analyzing the pros and cons of each. The fundamental question for Cerdà, in terms of its implication for traffic, the economy, aesthetics and hygiene, was the latitude or width of the streets. Thus, Cerda devoted some of his finest pages and many years of calculation, and finally came up with the cross-section which the streets of Barcelona extension have today.

⁴³ Raymond Unwin in *Town Planning in Practice* (1909) shows a “carrefour a gyration” attributed to Monsieur Eugene Henard in his *Etudes sur les Transformations de Paris*. This shows a roundabout with carriages circulating around a “plateau central.” The drawing is dated 1906. In the accompanying text, M. Henard is quoted as suggesting that “subways should be provided for all the footpaths leading to a space in the centre where the passengers could sort themselves and depart along the subway to whichever streets they

sectional drawings of a multi-decked future city to RIBA.⁴⁴ The street depicted by Henard contains three or four superimposed platforms. The first platform would be for pedestrians and carriages, the second for the tramways, the third for the various mains and pipes required for the removal of refuse, and the fourth for the transport of goods. In New York, arcades under Broadway were proposed in 1866 as a supplementary amenity for the new subway.⁴⁵ New York in the 20th Century represented a new frontier of the sectional city. The futuristic multi-decked traffic flows appeared more often in popular art than in professional literature. The frontispiece of Moses King's *King's Dream of New York* (1908) envisioned future Broadway as an urban canyon, with bridges connecting rooftops of offices across Broadway, and the streets as multi-level arcades servicing a multitude of pedestrian and automobiles. In hindsight, few of these urban visions mentioned the economic foundation of such tremendous urban infrastructure.

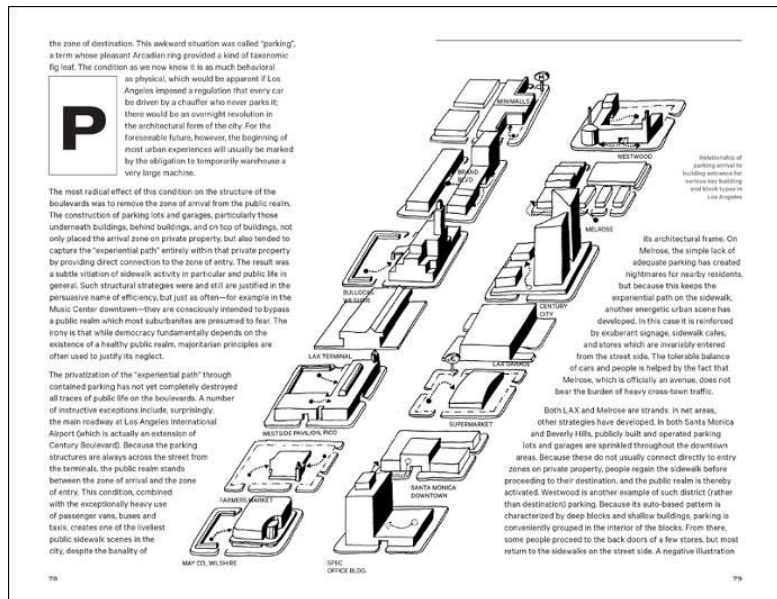
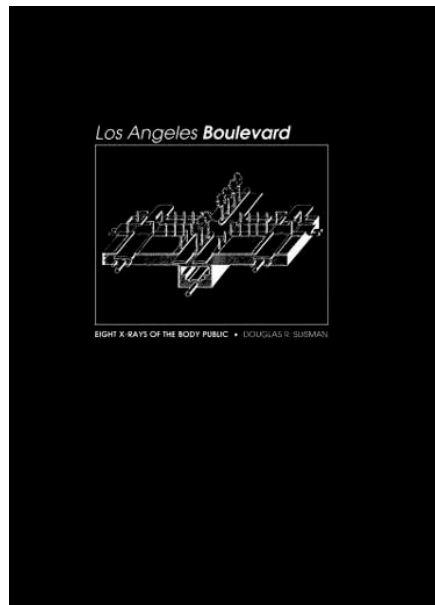
Saturated in this zeitgeist, Harvey Wiley Corbett and Hugh Ferriss were serious and consistent propagators for multilevel streets and their revolutionary potential for creating a new urban structure. In a 1913 perspective section published in *Scientific American* magazine, Harvey Wiley Corbett presented a city with intermeshed bridges and terraces while different modes of traffic were stratified. Yet Corbett, Koolhaas argues, did not intend to mitigate congestion, but to “escalate it to such intensity that it generates a completely new condition, where congestion

wished to reach.”

⁴⁴ John W. Reps, "The Cities of the Future." Department of City and Regional Planning, Cornell University, Ithaca, <http://urbanplanning.library.cornell.edu>.

⁴⁵ Vicent Scully, *American Architecture and Urbanism* (New York: An Owl Book, 1988), 85.

becomes mysteriously positive.”⁴⁶ The layering of the city functions eventually reversed the relationship between the urban space and the once privileged natural ground by reabsorbing the topography, the civic space, and market into a groundless topography (Figs. 5, 6, 7).



⁴⁶ Koolhaas, *Delirious New York*, 120-125. “A very modernized Venice” is a concept used by Corbett, quoted by Koolhaas, to describe an urbanity consisting of arcades, plazas, canals (streets), and bridges. In Corbett’s scheme for elevated and arcaded walkways, the entire ground plane of the city would be gradually surrendered solely to carmotive traffic. Trenches in this plane would allow fast traffic to rush through the Metropolis even faster. If cars needed more room again, the edges of existing buildings could be set back to create still larger areas for circulation. Buildings were carved out on the second story to accommodate pedestrian walkways. The arcades form a continuous network on both sides of streets and avenues with the introduction of bridges and flyovers. Along the arcades, shops and other public facilities are embedded in the buildings. Corbett claimed that, through this separation, the capacity of the original street would be increased at least 200 percent, more if the road consumes still larger sections of the ground plane. Corbett says: “We see a city of sidewalks, arcades within the building lines, and one story above the present street grade. We see bridges at all corners, the width of the arcades and with solid railing. We see the smaller parks of the city (of which we trust there will many more than at present) raised to the same side-walk arcade level... and the whole aspect becomes that of a very modernized Venice, a city of arcades, plazas and bridges, with canals for streets, only the canals will not be filled with real water but with freely flowing motor traffic, the sun glistening on the black tops of the cars and the buildings reflecting in this waving flood of rapidly rolling vehicles.”

Figure 7. In the pamphlet *Los Angeles Boulevard: Eight X-Rays of the Body Public*, Douglas Suisman indicates an analytical methodology to see the boulevards as the cross-section of a fuselage (left). He also argues (right) that the zone of arrival has been removed from the public realm in Los Angeles.

As opposed to New York, the street section of Los Angeles boulevards is involved in a critique about the loss of proximity in the public realm. In the pamphlet *Los Angeles Boulevard: Eight X-Rays of the Body Public*, Douglas Suisman indicates an analytical perspective to view the boulevards as the cross-section of a fuselage, which resonates with the fact that early sections were related to carpenters' ways of building vessels.⁴⁷ Suisman argues that understanding the "body public" through cross-sections, in a way of naval architecture, is very useful in interpreting the street as public realm. Suisman argues:

It is through the section drawing of the boulevard, rather than the plan, that we can best begin to relate urban form to urban experience, particularly with respect to the elusive transitions from public to private space. One measure of the city is the variety and richness of experiences which it fosters, and any attempt to rationalize a concept as multifarious as "urban experience" may seem hopelessly academic.⁴⁸ (Fig.7)

Suisman views the section not only as a neutral representation of the street, but also as a way to approach the subtle interactions and processes taking place in the public realm. His observation of the street section is that "arriving", unlike "entry," is a transitional event which is able to

⁴⁷ Ibid.

⁴⁸ Douglas Suisman, *Los Angeles Boulevard: Eight X-Rays of the Body Public* (Los Angeles: Forum for Architecture and Urban Design, 1989), 59.

define a segment of the public realm from the transitional space between the car lanes and the houses.⁴⁹ Based on his differentiation of the urban experiences embedded in the everyday events such as “arrival” and “entry,” Suisman critiques the Los Angeles boulevards for the detachment of the front side of an establishment from the boulevard, and for the absence of a transitional, ambiguous entryway, since people use the back lane only for car entry and other utilitarian services. In contrast to the ambiguity which could be usually found in traditional townscape, the moving traffic on the Los Angeles boulevards creates a “wall of moving vehicles,” behind which the neighborhoods along the boulevards have to withdraw from the public realm to their own private lots.⁵⁰ Thus, the section is turned into a diagnostic tool, facilitating a representation of both the public and private programs in a vertical cut. Moreover, Suisman’s metaphor of likening a boulevard to a fuselage, or the “body public” in Suisman’s terminology, is a derivative of the idea of seeing urban circulation as blood circulation in the body in late Renaissance. Therefore, a sequence of sections is likely to be an analytical tool when it extracts a running script along a boulevard with interactions and events in everyday urban life. In light of Suisman’s discussion of the sectional configuration of Los Angeles boulevards, it can be argued that the section of an urban artifact more accurately and vividly portrays the way in which a public space has been shaped, diagnosed, and proposed.

⁴⁹ Ibid., 61.

⁵⁰ Richard Sennett, *Flesh and Stone*, 330. In discussing Haussmann’s “three networks” which separated and divided communities of the poor with boulevards flowing with traffic. Sennett argues that the traffic flow created a “wall of moving vehicles” and the width of these streets was finely calculated in terms of Haussmann’s fears of the movement of crowds in a revolt.

2. Topography: Mat Urbanism

There have been a multitude of contemporary architectural works in which sections become a prominent generative tool in producing their spaces and programs, such as works by OMA, FOA, MVRDV, Diller Scofidio + Renfro, etc. There is a tendency that the entire design process is increasingly engaging with interventions in urban topography, such as in OMA's Euralille, FOA's Yokohama Port Terminal, MVRDV's Villa VPRO, and the New York High Line Project. Architects, landscape architects and planners have been thrown into an interdisciplinary environment in which no single practice is able to take the lead. At the same time, increasing interdisciplinary cooperation prompts architectural society to view the entire ground surface as a single object. Buildings, infrastructure, and landscapes coalesce into a continuous inhabitable surface. Recognizing the significance of these practices in dealing with the urban topography in a creative way, this section starts with a review of Fumihiko Maki's "collective form," then turns to Alison Smithson's "mat building," and then discusses the renewed interest in mat urbanism in Stan Allen's discussion of a new urban topography, which he called "thick 2-D."⁵¹

Walter Benjamin, in his article "Naples," defined the "porous city" as an urban condition in which "action and architecture interpenetrate each other." Notably, the image of the Casbah, repeatedly represented by travelers, artists, and architects, was engraved in the collective

⁵¹ Stan Allen, "Mat Urbanism: The Thick 2-D," in *Le Corbusier's Venice Hospital and the Revival of Mat Building*, Case #2, ed. Hashim Sarkis (New York: Prestel, 2001), 118-126. See also Alison Smithson, "How to Recognize and Read Mat Building," *Architectural Design*, September 1974.

imagination of the oriental culture.⁵² The Casbah contains a wealth of improvised spatial elements which continues to inspire modern architects. In Fumihiko Maki's investigations in "collective form," he raised an urban design approach based on "evolution" as opposed to "design."⁵³ The "collective form" reflects the architect's attempt to unleash the generative logic of a segment of a town or city. For Maki, "collective form" includes "compositional form," "megastructure," and "group forms." The "group form," as the last and most advanced approach of the three forms, evolves from a system of generative elements. Like mat urbanism, the concept of "group form" is firmly rooted in modernists' fascination with Mediterranean hill towns or Arabic Casbahs.

Maki and Smithsons (Alison and Peter Smithson) are among a group of architects who made the last attempt to approach urbanism through the arrangement of forms before such urban visions lost favor in the 1970s. What they attempt to address has transcended the architectural language as geometrical organizations. Like Maki, Alison and Peter Smithson composed an architectural language and its underlying spirit in a mat-like form. This language was extracted from the impression of Mediterranean hill towns, as what Stan Allen called "Casbahism," with a high degree of connectedness and inter-changeability of the parts and, at the same time, with a

⁵² Zeynep Çelik, *Urban Forms and Colonial Confrontations: Algiers under French Rule* (Berkeley: University of California Press, 1997) , 21.

⁵³ See Fumihiko Maki, *Investigations in Collective Form*, St. Louis, MI: The School of Architecture, Washington University, 1964. Also see Rem Koolhaas, "Singapore, Portrait of a Potemkin Metropolis; Songlines...or Thirty Years of Tabula Rasa," in *S, M, L, XL.*, ed. Rem Koolhaas, Bruce Mau and O.M.A. (New York: The Monacelli Press, 1995), 1044.

stability of its overall performance. When the “mat building” moves up in scale from architecture to urbanism, its organizational logic starts to rely on traffic movement in a form of “stem” or “clusters,” a treelike hierarchical transportation system and the catchment area around the interchanges.⁵⁴ This geometric order of this “stem-cluster” urban structure determines the internal paradox between the high connectedness and the dispersing density. Due to this paradox, the “mat building” is not able to secure a high degree of connectivity with other parts of the city that have low density. Alison Smithson recognizes the uncontrollable power of infrastructure to guide the future development of the city. However, in reality, the increasing connectedness (with advanced urban infrastructure) often coincides with high density and more concentration.

Alison Smithson tended to “integrate rigorously up-to-date principles of space making with a traditional sense of well-being” and “of place-making in the phenomenological or anthropological sense.”⁵⁵ Conversely, the disorder (or, in actual fact, an indefinable order) of the Casbahism and its related esthetics undermines the formal language of Smithson’s imagination of “mat urbanism” in real urban conditions. The “thick 2-D” is not the outcome of a completely impromptu urbanism. External compression and internal administration are indispensable conditions in shaping a modern mat city.

As opposed to Smithson’s fascination with an architectural language, Stan Allen is more

54 Alison Smithson (ed.), *Team 10 Primer* (Cambridge, MA & London: The MIT Press, 1968), 64.

55 Stan Allen, “Mat Urbanism: The Thick 2-D,” in *Le Corbusier's Venice Hospital and the Revival of Mat Building*, Case #2, ed. Hashim Sarkis (New York: Prestel, 2001), 118-126.

interested in reformulating an urban ecology of a continuous livable surface, above and below a ground surface. To Allen, it is misleading to refer to the surface as a pure flat plane. He argues that mat building, with its attention to the space between things and its syntax of part-to-part connection, “is more significant as an urbanistic model than as a model for individual buildings,” and “in mat configurations, section is not the product of stacking as in a conventional building section, but of weaving, warping, folding, oozing, interlacing, or knotting together.” He believes that Smithsons’ infrastructural ideas can facilitate “systems of movement, service and support that give direction to program without over-determining the use or meaning of individual spaces.”⁵⁶

Los Angeles has long been seen as a model of a mat-like urban configuration. The spatial structure of Los Angeles justifies the correlation between connectedness and density. Los Angeles has developed a polycentric urban form knitted together by its infrastructure, i.e., the freeways. However, this structure in fact undermines the architectural agenda of “mat urbanism” because the city has grown into a radically sprawling and indeterminate form.⁵⁷ Thus, the

⁵⁶ Ibid.

⁵⁷ Ibid. Stan Allen claims that the urbanistic question today is “how to give space to the active unfolding of urban life without abrogating the architect’s responsibility to provide some form or order.” Hence, he writes: “The experience of the city today is not so much the orderly progression of scales as an experience of rapid shifts in scale and speed of movement. Today we tend to move with minimal transition from labyrinthine interiors to movement systems: directly from the mall to the freeway. Emergent mat-building effects are visible in unexpected locations: Korean mini-malls, freeway interchanges, suburban cinemaplexes, intermodal transportation centers, informal markets in traditional city centers, proliferating spaces of leisure and recreation. In all of these cases, architecture’s mediating role becomes increasingly difficult to maintain...The Smithsons ... still hold to a fairly traditional role of the architect as the provider of urban order, and of architecture as the agency through which that order becomes legible.”

sprawling urban pattern impedes the connectivity between its communities, turning the metropolitan area into a conurbation of numerous enclaves. Los Angeles has overtly thinned out its mat condition so that, in the micro scale, the density of this mat is dissolved, accompanied by its internal connectivity as a single city.

In contrast to Los Angeles, Hong Kong and other densely inhabited East Asian cities have created an urban form with both high density and high connectivity. Urban identity Hong Kong stays in stark contrast to a mat-like urban condition raised by Smithson and Allen, because the “2-D” is only of modest importance in the spatial configuration of Hong Kong. However, Hong Kong has a topography composed of more “weaving, warping, folding, oozing, interlacing or knotting together” as Stan Allen notes. In terms of Stan Allen’s narrative of the “thick 2-D,” this densely inhabited Asian city has developed a greater “thickness” with more intimate interpenetration between buildings and actions. In addition to Hong Kong, New York and Shanghai are also of relatively high density and, at the same time, high connectedness. These instances can justify the correlation between connectedness and density. The school of mat urbanism must be made aware of the relationship between the connectivity, density, and thickness of the city (Figs. 8, 9).

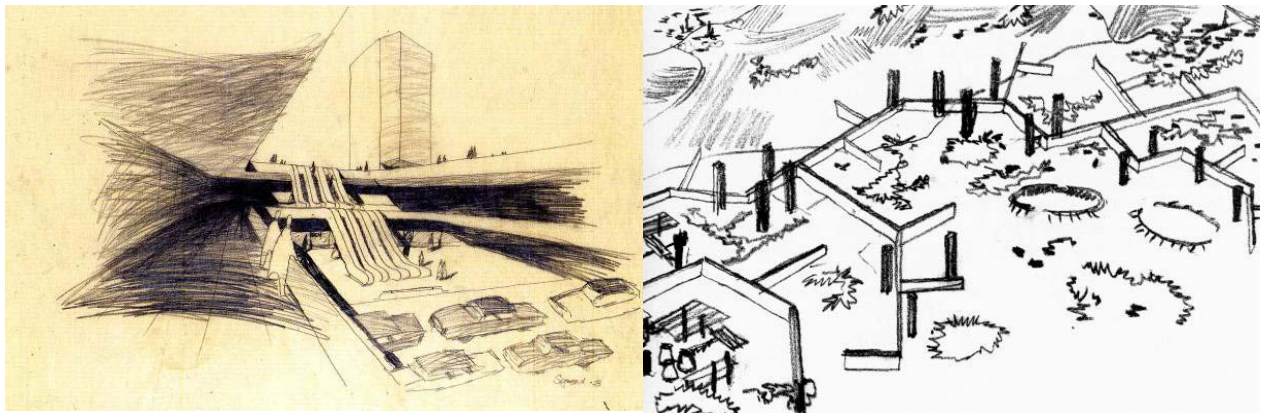


Figure 8. Berlin Hauptstadt proposal, Alison & Peter Smithson, 1957.

Source: Alison Smithson, *Team 10 Primer*, Cambridge, MA and London: the MIT Press, 1968.

Figure 9. Alison Smithson's sketch of Golden Lane network.

Source: Alison Smithson, *Team 10 Primer*, Cambridge, MA and London: the MIT Press, 1968.

3. Mobility: The Cityscape of Circulation

The sociologist John Urry, in *Mobilities*, depicts four main senses of “mobilities”: first, something that moves or is capable of movement; second, a mob, a rabble or an unruly crowd; third, the social mobility; and fourth, migration or other kinds of semi-permanent geographical movement. An investigation of such generic “mobilities” includes various kinds and temporalities of physical movement, as well as technologies that enhance people’s movement, i.e., transportation technologies.⁵⁸ Urry provides a new window to examine the social ordering as a hybrid of bodies, texts, machines, and architecture. Movement is thus frozen into a solid structure and results in a “movement space.” Free movement emerged as a revolutionary idea when Napoleon and Haussmann envisioned the new roads as arteries in an urban circulatory system. As John Urry notes, in step with the maturation of the new transportation technology, new knowledge and norms of social manner and behavior were developed, such as timetables, pedestrian channeling in public spaces, queuing, and traffic codes. Conversely, the new knowledge and norms, in turn, reshaped the spaces which accommodate or adjoin the machines.

⁵⁸ John Urry, *Mobilities*(Cambridge, UK & Malden, MA: Polity Press, 2007), 3-16.

The material and cultural objects could be a function and derivative of social relations in a larger scale.⁵⁹ In light of this, the remainder of this study is rather driven by a concern mainly about the first and second senses of mobilities, and about the “movement space” as a hybrid of bodies, machines, and architecture. It also attempts to clarify the connection between crowding and mobility, when crowding was considered by modern planners to be a serious social problem to be eliminated.

Georg Simmel’s essay *Metropolis and Mental Life* explores the intensification of movement and stimulation in which modern man is involved.⁶⁰ Simmel attempted to construct a theory of estrangement in the context of the metropolitan space, especially through his observation of the restructuring of Vienna at the turn of the 20th Century. In another article, *Bridge and Door*, Simmel illuminated the processes of separation and connection as two sides of the same

⁵⁹ Ibid. 21. Many of the mobility systems which are now significant date from England and France in the 1840s and 1850s. These systems include the national post system, commercial electrical telegram, national railways and railway hotels, department stores, and separate circulation of tap water and sewage. Elevators and escalators were applied to high-rise apartments and public spaces in the late 19th Century. The twentieth Century bore witness to the invention of the car and expressway system, national telephone system, air power, high speed trains, modern urban systems, budget air travel, mobile phones, and networked computers. Urry stresses the spatial turn in the 1980s when he discusses the materiality of social relations. The “spatial turn” involved theory and research that demonstrated that social relations are spatially organized and such spatial structuring makes a significant difference to social relations. Thus, space is increasingly viewed as being made up of moving elements involving various “power-geometries.” Spaces are viewed as comprised of various materials, objects and environments, that are intermittently in motion. Their materials are assembled and reassembled in changing configurations and rearticulated meanings. Social life is fundamentally constituted by material objects, including “nature” and “technologies” that directly or indirectly move or block the movement of objects, people, and information.

⁶⁰ Georg Simmel, "Metropolis and Mental Life (1903)," in *The Blackwell Cityreader*, ed. Gary Bridge and Sophie Watson (Oxford and Malden, MA: Wiley-Blackwell, 2002).

phenomenon. The door connects outside and inside; the bridge indicates above and below.⁶¹ In other words, the separation of above and below is a form of inside and outside. Georg Simmel explores the spatial dimension of social interactions. He reformulated the idea of movement from a value-neutral, information-free idea into a sense of environment. For the first time, the metropolitan experience was systemically studied from a perspective of its cultural and spatial implications.

For modernist planners and architects, mobility is rather a solution to over-crowding which was considered to be the cause of social unrest and unruly gathering with a political purpose. Richard Sennett writes: “The Enlightened (Old Regime) urbanist had imagined individuals stimulated by movement through the city’s crowd; the 19th Century urbanist imagined individuals protected by movement from the crowd.”⁶² The boulevard, privileging the rapid and directional motion, insulates and thins out the city, and diffuses the gathering of a “purposeful crowd.” The glass-roofed arcades of the city served as “urban capillaries,” and “all the movements which gave pulsing life to the city concentrated in these small, covered passages with their special shops, little cafes and surging clots of people.”⁶³ Early 19th Century Paris was a city dominated

⁶¹ David Frisby, *Cityscapes of Modernity: Critical Explorations* (Cambridge: Polity, 2001), 226.

⁶² Sennett, *Flesh and Stone*, 324.

⁶³ *Ibid.*, 255-281. This significance of ideas of movement and circulation especially followed William Harvey’s discovery of how blood circulates within the human body, and Galileo’s notion that a natural state is to be in motion and not at rest. Planners in the Enlightenment period wanted the city to function like a healthy body. Since the beginnings of the Baroque era, urban planners had thought about making cities in terms of efficient circulation of people on the city’s main streets. Instead of planning streets for the sake of ceremonies of movement toward an object, the Enlightenment planners make motion an end in itself; they emphasized the journey. The street was an important urban space, whether it ran through a residential neighborhood or a civic

by the arcades for strolling flaneurs. Improvised walking “continued to be stimulated by a plethora of desires and goals stemming from the interrelations between bodily movement, fantasy, memory and the texture of urban life.” The street itself was reformulated into a destination of activities, instead of a passage. The mobility system provides “spaces of anticipation” that permit predictable and relatively risk-free repetition of movement.⁶⁴

The completion of the Grand Central Terminal in 1913 and the transfer of its air-rights along Park Avenue defined a new cityscape of clustered urban circulation. When the terminal was built, it was seen as both a monumental structure and a successful financing machine which produce revenues to maintain such a megastructure. In Grand Central Terminal, the detachment of air rights for property development from the tracks demonstrated a new urban form with its comprehensive organization of different flows: trains, metros, taxis, private cars, and pedestrians. A section of Grand Central Terminal was published in *Scientific American* (December 7, 1912). As a machine to “tame the crowd,” Grand Central Terminal is composed of new approaches which were later adopted by Hong Kong.⁶⁵ The most remarkable one is the complete separation between pedestrians and vehicles. The Park Avenue viaduct, ramping up from the south, branched into two one-way roads above the concourse of the terminal. The two elevated driveways cut through the Helmsley Building as two tunnels and sloped down before they

center.

⁶⁴ John Urry, *Mobilities*, 13.

⁶⁵ Anthony Raynsford, "Swarm of the Metropolis: Passenger Circulation at Grand Central Terminal and the Ideology of the Crowd Aesthetic," *Journal of Architectural Education* 50, no. 1 (1996): 2-14.

reached the 46th Street. Before the popularity of escalators, the pedestrians were funneled into a system of ramps, stairways, balconies, and two levels of concourses. What Hong Kong had learned from Grand Central Terminal is that the pedestrian zone can provide easy access to the platforms, sidewalk entries and a broad range of shops, bars, and amenities.

In addition to the pedestrian-vehicle separation, Grand Central Terminal rested on a two-tier train yard extending into the basement of adjacent office towers. The air rights trading became the economic engine for such a “terminal city,” so named by New York Central’s chief Engineer William Wilgus. In a 1940 journal article, Wilgus explained his “concept of an Entirely New Terminal Utilizing Air Rights.”⁶⁶ Wilgus proposed to construct revenue-producing buildings with income sufficient to finance the improvement of the terminal structure. Likewise, in Hong Kong, as early as the late 1970s, joint ventures were established between MTRC (Mass Transit Railway Corp) and consortiums of private development industry. Cheung Kong is the first private developer to reach an agreement with MTRC to develop the properties on top of the Central and Admiralty site along the Island Line. According to the agreement, MTRC would take a certain portion of the profit from the development. Yet, unlike the rare connection between the Park Avenue office towers and the concourse of the Grand Central Terminal, the developer would take advantage of Hong Kong building codes by building a three-story podium above the station concourse. The direct connection from the metro station to the retail podium reflects the

⁶⁶ Kurt C. Schlichting, *Grand Central Terminal: Railroads, Engineering and Architecture in New York City* (Baltimore: The Johns Hopkins University Press, 2001), 59.

spatial effect of social contracts as a new urban form.

The belief that architectural space should facilitate free movement and open accessibility was pervasive in high modernism. As Van Eyck states (quoted by Alison Smithson) in *The Team 10 Primer*, “the time has come to approach architecture urbanistically and urbanism architecturally.” In the post-war decades, an optimism related to urban renewal was in full swing and gave rise to a special type of urban territory composed of highways, underground concourses, escalators, footbridges, and multiple overlapping terraces. It is an elaborated variation of Harvey Wiley Corbett’s “very modernized Venice.” A “Simultaneous Movement System” as a design code was set forth by Edmund Bacon in his *Design of Cities*.⁶⁷ Bacon proposed a design structure on the basis of movement as opposed to buildings in leading the growth of the city. Bacon’s design structure redefined the urban surface as a deep and dense movement system acting as glue adhering to buildings. In discussing Philadelphia’s Market Street Project, Bacon depicted his system as a diagram of subways and railroads, pedestrian concourses, streets, buses, parking structures, and vertical circulation cores. The entire ground surface would be cast as a continuous podium of infrastructure. Therefore, the order and integrity of the city is expressed by flows instead of static volumes. In order to justify his dissertation, Bacon presented a series of city sections which articulated the way in which these movement systems should be integrated into the city, and how the public spaces should respond to this integration. In general, he initiated a discourse of urban design through the management of mobilities.

⁶⁷ Edmund Bacon, *Design of Cities* (London, Penguin Books, 1976), 252-299.

The urban territories outlined by Bacon, composed of multiple movements and programs, overturned the conventional exterior-interior, public-private binary and blurred the border between the architecture and the city. The idea of “making space contingent on motion,” critiqued by Sennett, was in actual fact the doctrine in postwar urban planning.⁶⁸ Architects’ mega-structural frenzy materialized into large-scale urban restructuring with the purpose of reworking the entire city as a self-contained structure served by internal circulation systems. The postwar cities were turned into “cross-scapes,” a landscape embodying constant movement. The volume and scale of freeways, parking lots and flyovers are formidable, and can hardly be incorporated into the traditional urban fabric. The unprecedented ease of motion erased the meaning of surroundings and the constraints of geography. Each segment of city space became merely a passage from point A to point B. The unfettered urban renewal did not result in a city of part-to-part connectedness, as Smithson advocated. In contrast, the meandering freeways cut the city into numerous enclaves which can only access the city through freeways.

Schemes to balance mobility and the human scale were attempted. In 1963, Colin Buchanan published his report *Traffic in Towns*. In this report, Buchanan generalized many experimental thoughts on mobility in the pre-war era and consolidated them into a theory on town traffic and

⁶⁸ Richard Sennett, *The Fall of Public Man*, 14. Sennett says: “the erasure of alive public space contains an even more perverse idea—that of making space contingent upon motion. In the Defense Center, as with lever House and Brunswick Center, the public space is an area to move through, not be in. The ground... is ‘the traffic-flow-support-nexus for the vertical whole’.” This means that the public space has become a derivative of movement or a function of motion. Motion, instead of liberating people from congestion, has become “the most anxiety-laden of daily activities.” Unrestricted motion of the individual was privileged as an absolute right.

urbanism as a broader subject. The concepts of “environmental area” and “traffic architecture” were raised in this report and loosely defined as an inhabitable pedestrian area served by distributors in a cellular form, grade-separated from the motorways or public transit.⁶⁹ This was one of the most influential concepts to be translated into the town planning practice of Hong Kong. The environmental areas would be of different characters, and the level of traffic would vary according to their function (residential, shopping, and industrial). The multi-level “environmental area” turned out to be widely disputed by British planners because they were unwelcome, polluted, and segregated from town life. These plans for “environmental areas” fell out of favor in the 1970s because they formulated pedestrian islands wrapped by highways, which could only be served by cars. Milton Keynes and Cumbernauld were two Mark-II British new towns built according to Buchanan’s urban vision. These two towns were designed for full car ownership, yet created an irreconcilable dilemma between conservation of the human scale and the ruthless encroachment of highways on the human scale.

The unprecedented growth of car ownership in the post-war era and the resultant decline of

⁶⁹ Colin Buchanan, et al. *Traffic in Towns: A Study of the Long Term Problems of Traffic in Urban Areas*. Reports of the Steering Group and Working Group Appointed by the Minister of Transport (London: H.M.S.O., 1963). Simon Gunn, “The Buchanan Report, Environment and the Problem of Traffic in 1960s Britain,” *Twentieth Century British History* 22, no. 4 (2011): 521-42. Guy Ortolano, “Planning the Urban Future in 1960s Britain,” *The Historical Journal* 54, no. 2 (2011): 477-507. SKM Colin Buchanan, “Traffic in Towns: A Retrospective,” SKM, 2013, www.transportincities.com. The “environmental areas” were developed alongside the increase of private cars. In some high-density areas, such as London’s Oxford Street, these principles might be implemented vertically by building multi-level decks: the lowest for cars and buses, the middle for pedestrian shopping, and the upper for residences and green spaces. This was an example of what the Buchanan report implied by a new “traffic architecture,” so that the future city would have the movement of traffic built into its very fabric.

environmental conditions in the European and American metropolises prompted the 1960s' urbanists to scrutinize the quality of environment when unshackled mobility became a nightmare of the city. In 1968, a whole issue of *Architectural Design* magazine was dedicated to the topic of "mobility," guest-edited by architect and transportation consultant Brian Richards.⁷⁰ This profile discussed the role of public transportation and envisioned an urban future not necessarily relying on the automobile. Bemoaning the compromised human scale and environmental quality threatened by the formidable masses of motorways, this *Architectural Design* profile stressed the role of design professionals who are in charge of the integration of the urban motorway and other infrastructure into the livable urban fabric. However, the involvement of design professionals in the designing of traffic was limited, unless the architect was commissioned before the structural shell was developed by engineers.

The modernist optimism of the mid-1960s was interrupted by an economic restructuring from welfare capitalism to neo-liberalism. The architectural discourse began to embrace the semiotic meaning of buildings starting from the late 1970s. Throughout the developed West, for two decades under the Reagan-Thatcher administrations, public investment in urban infrastructure was very low and, at the same time, very little public attention was paid to the instrumentality of architecture and urbanism.⁷¹ It was not until the late 1990s that the interest in mobility was

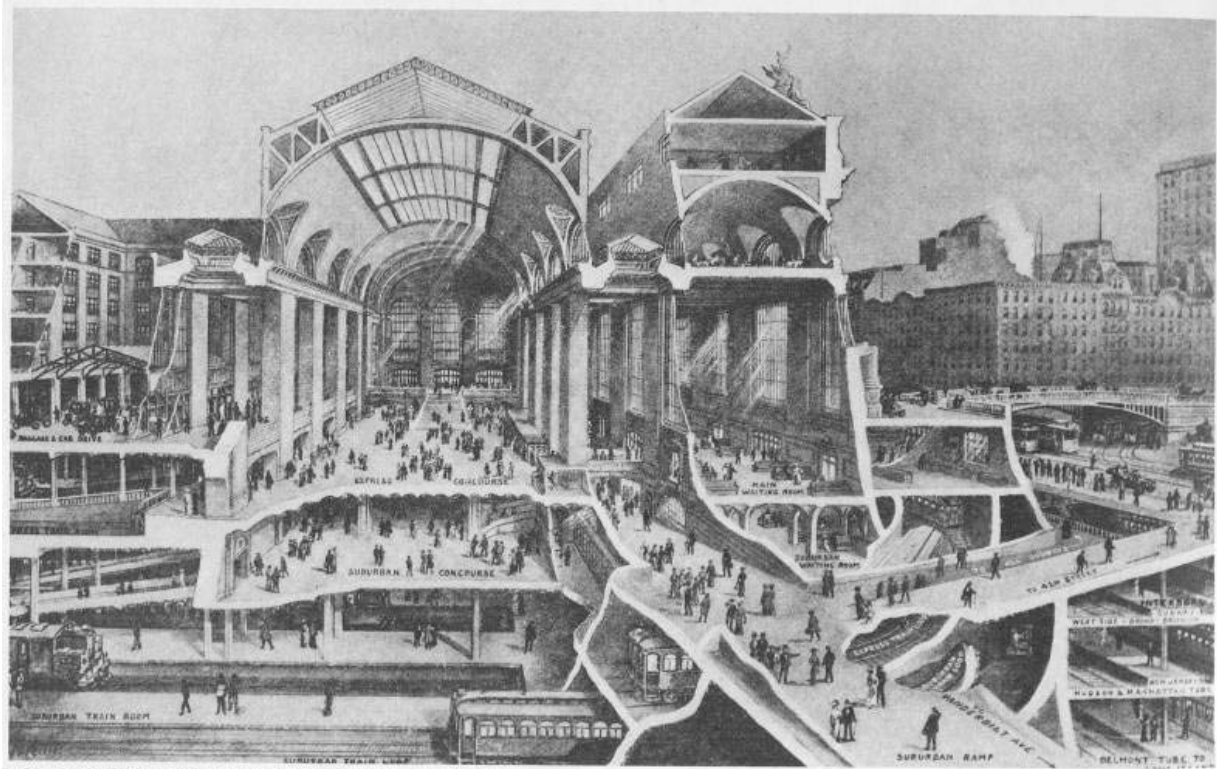
⁷⁰ Brian Richards, "Mobility," *Architectural Design*, 1968 (?).

⁷¹ Stan Allen, "Infrastructural Urbanism" in *Center 14: On Landscape Urbanism*, eds. Dean Almy (Austin, University of Texas at Austin, 2007), 174-181. Stan Allen states: "This turn toward a semiotic architecture at the end of the sixties and the beginning of the seventies has itself been subject to intense critical scrutiny –

reincorporated into the agenda of architecture, accompanied by society's increasing concern with infrastructure's role in achieving the public good.

The 1960s was a critical moment when Hong Kong and other East Asian "tigers" looked to the developed West for urban planning models in order to relieve their own demographic pressures. Recent discourses on the modernism of China should be reexamined with reference to a more detailed historical survey of this moment. Hong Kong's motorway development was in full swing in the mid-1960s, along with tunnels, car parks, and flyovers. Unlike Hong Kong and other Asian cities (e.g., Singapore), Britain was already a car-owning society around 1965, and car ownership in Britain doubled from 1955 to 1965. Although public transit was designed to be integrated into the urban fabric in accordance with bus or taxis stops, due to the organization of multiple civic authorities and the private-public divide, the urban planning department had little control over public transit and private developments clustering around the transit stations. However, the Crown Colony Hong Kong was practicing a different land policy than that of Britain. Thanks to the passionate role of Hong Kong MTR (Mass Transit Railway) in property development in the catchment areas of metro stations and the practices of POPS (privately owned public space), the integration of different mobilities into the city became an urban design code in Hong Kong (Figs. 10, 11).

from both a formal and an ideological point of view. But even the most radical critiques have left the fundamental assumption that architecture behaves like a discursive system intact...it is not entirely coincidental that the twenty-five year period coinciding with the rise of postmodernism in architecture has seen a massive defunding of urban infrastructure...architects themselves have retreated from questions of function, implementation, technique, finance and material practice.”



Section of Grand Central Terminal, *Scientific American*, December 7, 1912.

Figure 10. Section of Grand Central Terminal, *Scientific American*, December 7, 1912.

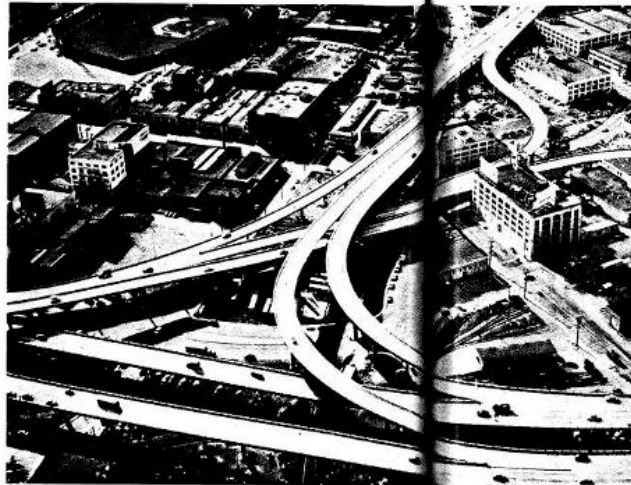
TRANSPORT TOMORROW

Brian Richards

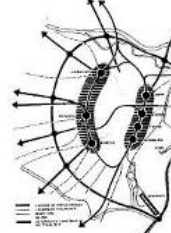
Traffic in towns today means motorways, fly-overs and bridges—summing ever larger over their surroundings. Towns are disintegrating under the impact of traffic engineering. Architects are being left to build on the bits left between.



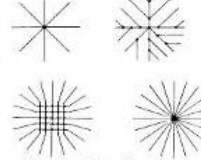
Motorway plan for Britain: 1960 sites are planned for 1960. The Los Angeles freeway system shown will be 1960 sites in 1980. Source: Road Federation.



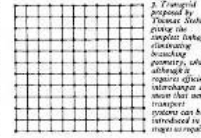
1. London railway and underground map showing the proposed new line from the centre to the outer city, which has to be made by bus or car as an increasingly arterialed road network.



4. Map showing disposition of sub-centres in Tokyo, where new developments occur in its completion, although reducing pressure on its centre itself. Photograph: K. Kuroki.



2. Grid superimposed on a radial network.



3. Triangular network proposed by Thomas Scholten, showing the complex layout, changing geometry, which although it requires efficient interchange does mean that new transport systems can be introduced in stages as required.



5. Car railway interchanges pass through. No interchange system. Traffic each day. Good, although still dependent, rather the question of building high capacity systems with the much lower capacity networks spread rather than concentrated processes.

The population explosion, increasing affluence and desire for mobility are all factors contributing to the continuing growth of car ownership. A widespread belief exists however among planners and traffic engineers, not to mention politicians, that the car can remain with us, used in much the same way as today, until the end of this century and, because of this, the reconstruction of the city fabric, to allow for its greater use, is essential for its survival. Unless we do this, we are warned, "our cities are doomed, and only the prototype city, slowly resembling Los Angeles will survive."

... are old enough to drive; many are too old together there may number 25 per cent of the population or more. But even of those that can and like driving, many may, given free choice, prefer to do so for only certain journeys, partly dependent on how good the alternatives are. Few cities in the world are rich enough to provide for a decent built environment with anything like full car use, so that it is now generally recognized that an alternative to private car transport has to be provided—the form of public transport. The role that this could play in the future is important. Architects and planners (being car owners, most of us are guilty of never having given

Public transport

The network

Our existing cities are obliged to use still the inherited road and rail networks, often centuries old or at least 50 years old. Most railways are radial systems built for travel into city centres from peripheral residential areas and so unsuitable for cross-city trips. Road networks are often sufficient for these cross trips to be made; but motorway construction is often necessary in cities with large car usage, to alleviate congestion. Such roads relieve pressure on central streets and may help to create new workplaces outside the centre.

From ideal transport networks should take was put forward in a paper (presented in 1967 in Pittsburgh to the Second International Conference on Urban Transportation) by Professor Thomas Scholten, who suggested that a simplified grid could be laid across a city consisting of movement systems to serve public transport. Initially these might be existing roads, freed from other traffic, or existing railways, and on these could run shuttle buses or shuttle train services. As new technology developed, new systems would be added and interchange between such systems would be excellent, the service being frequent, long waits occasioned by running to time being eliminated. The

station or stop. A network of this kind avoids the inherent problem raised by rapid transit technology—that of high potential capacity (40-60,000 per hour) and correspondingly high unit fee: rarely are such systems throughout their length, throughout. Lower capacity systems on line works could give better service, routes closer to homes and workplaces rather than increasing pressure on avoiding the problem of handling present-day high-capacity systems. Central handles 500,000 people an hour. Small scale networks would need 1

Figure 11. In 1968, a whole issue of *Architectural Design* magazine was dedicated to the topic of "mobility," guest-edited by architect and transportation consultant Brian Richards.

4. Space: Interior Urbanism

The concept of public space is an intellectual heritage of the Enlightenment. However, I would like to argue that the current imagination of public space is trapped in a series of conjectures and

assumptions entrenched in the urban fabric of the 18th and 19th Centuries, especially the palatial courts, the civic gardens, the squares, and the treed boulevards. There have been numerous endeavors to replicate an ideal agora in private spaces and in the spaces of transportation: department stores, train stations, suburban malls, and shopping centers.⁷² Thus, the constantly renewed patterns of consumption and bodily interaction between individuals made the public space a function of technologies. The public has been either magnified to a networked domain or condensed in the vortex of a multitude of preset programs. The encounters of the public and the private facilitated the proliferation of variations of the street.

The “public” and “private” began to acquire their modern connotations by the end of the 17th Century. To summarize Richard Sennett’s inspection of the history of the public man, the “public” means a domain open to the scrutiny of anyone; whereas, the “private” means a sheltered region of life defined by one’s family and friends.⁷³ Strangers from various social origins could socialize in a pattern which was not circumscribed by feudal privileges. The denotation of the public realm was broadened in the 18th Century in both Paris and London, when the bourgeoisie stepped out of their own circles of family members and close friends to enter a more diverse social domain. With the constitution of a civil society based on trade and labor, a new set of social codes was established to manage the way in which a crowd of strangers could discuss public affairs and voice their opinions. However, what sets the “public” of the 19th

⁷² It should be noted that most train services in the 19th and Early 20th Century were mostly privately owned.

⁷³ Richard Sennett, *The Fall of Public Man*, 3-27

Century apart from that of the 18th Century is the secularism which arose in the 19th Century with the introduction of national industrial capitalism after the French Revolution (1789-1799). The secularism changed the form of the public space as a product of the Enlightenment. Industrial capitalism reformulated the social relationships between social beings, marking the rise of the “social spaces.”⁷⁴ When things became commodities, the social spaces became the products of economic relationships; urban landscape became a display of commodities and trading, or even an appeal to consumption. We should recognize that secularism did not eliminate the public space as Richard Sennett claims; instead, the public space withdrew from the piazza, square, or street into the building interior within the private sphere.

Walter Benjamin’s *The Arcades Project* initiated a project on metropolitan urbanity. This urbanity is often characterized by the relationship between two processes: (1) the intensive display of the commodities and capitalism and its space turned into a panoramic landscape (*intérieur*); and (2) strolling and gaze (*flanuerie*) as a way to represent this landscape as a narrative. In his investigation of the evolution and alienation of the street (e.g., arcades, department stores, train stations, panoramas, exhibition halls), walking has been converted into a way to elucidate the mechanism and implications of these street variations. Benjamin’s works

⁷⁴ Henri Lefebvre, *The Production of Space*, Trans. Donald Nicholson-Smith (Oxford UK & Cambridge USA: Balckwell, 1991), 68-99 . For Lefebvre, the social space cannot be adequately accounted for either by nature or by its previous history. Thus, space is not a thing, but rather a set of relations between things (objects and products); spaces are produced. The “raw material” from which spaces are produced is nature. They are products of an activity which involves the economic and technical realms, but which extends well beyond them. Space is at once a precondition and a result of social superstructures. The social relationships which form the social space include property relationships, and the forces and means of production.

launched a “theory of experience” through his studies on a “world of things” (commodities) in the city.⁷⁵ *The Arcades Project* initiated an inquiry about metropolitan spatiality in collective movement and transition.⁷⁶ In his article *Naples*, Benjamin observed that in this Italian hill town, “buildings and actions interpenetrate in the courtyard, arcades and stairways” in a fashion of improvisation. “Balcony, courtyard, gateway, staircase, rooftop are at the same time stage and boxes.”⁷⁷ Benjamin called this phenomenon “porosity.” Thus, in extreme proximity and density, the dynamics and complexity of the city were condensed into an architectural scale.

The Parisian arcades in the 19th Century, as the predecessor of department stores and modern shopping centers, originated from a joint venture and a consensus agreed by vendors to resolve the conflicts between trade and traffic. The form of arcades was made possible by three technologies invented in the early 19th Century: glass with straight edges, cast iron structure, and gas lighting. The first arcade, Passage des Panoramas, was built in 1799. Most Parisian arcades were built in the 1810s and 1820s. As late as 1900, due to tightening building regulations with the concerns about fireproofing, arcades were no longer allowed to be built in cities of the West.⁷⁸ However, many department stores and shopping centers were inspired by the form of

⁷⁵ Rolf Tiedemann, "Dialectics at a Standstill: Approaches to the Passagen-Werk." In *The Arcades Project*. (Cambridge, MA and London: The Belknap Press of Harvard University Press, 1999); Walter Benjamin and Asja Lacis, "Naples," trans. Edmund Jeffcott, in *Reflections: Essay, Aphorisms, Autobiographic Writings*, edited by Peter Demetz (New York and London: Hellen and Curt Wolff Book, 1986), 163-173.

⁷⁶ Walter Benjamin, *The Arcades Project*. Trans. Howard Eiland (Cambridge, MA: The Belknap Press of Harvard University Press, 1999).

⁷⁷ Walter Benjamin and Asja Lacis, "Naples," 167.

⁷⁸ Johann Friedrich Geist, *Arcades: The History of a Building Type* (Cambridge, MA: MIT Press, 1983).

arcades, yet they were not operated in the way of arcades built in the early 1800s, such as the Cleveland Arcade (Cleveland, 1890) and the Galleria Vittorio Emanuele I (Milan, 1877).

As both a building type and a communal space, arcades posed an urban model in the compressed streetscape of Paris to resolve the conflict between the public and the private spheres. A more civilized social manner and behavior code was established in a semi-public, semi-interior environment and in a crowd of strangers. Flanked by two rows of shops, the arcades were stripped of the exterior elevation. For the first time in history, a way of displaying the commodities was embodied into an urban form and an architectural fashion. Notably, arcades as a building style were an important feature in Fourier's Phalanstery.⁷⁹ The Phalanstery enlightened many urban visionaries' imagination of the future city with the networked, grade-separated passage-galleries across traditional streets, squares, and waterways. One example is Corbusier's Obus Plan, which was somehow inspired by the arcades of the Boulevard

⁷⁹ Tony Moilin, *Paris in the Year 2000* (1869), quoted by Walter Benjamin in *The Arcades Project*. The arcades became a megastructure penetrating into the entire city of Paris in Moilin's depiction of the future city. "On the second story of every house, they (socialist government) took all the room that faced the street and demolished the intervening partitions... all the rooms that faced the street and demolished the intervening partitions... In the newer quarters, where neighboring houses have their floors at approximately the same height, the galleries could be joined together on a fairly even level... but on the older streets... the floors had to be carefully raised or lowered, and often the builders had to redesign themselves to giving the floor a rather steep slant, or breaking it up with stairs. When all the blocks of houses were thus traversed by galleries occupying... their second story, it remained only connect these isolated sections to one another in order to constitute a network... embracing the whole city. This was easily done by erecting covered walkways across every street... Walkways of the same sort, but much longer, were likewise put up over the various boulevards, over the squares, and over the bridges that cross the Seine, so that in the end... a person could stroll through the entire city without ever being exposed to the elements.... As soon as the Parisian had got a taste of the new galleries, they lost all desire to set foot in the streets of old-- which they often said, were fit only for dogs." (Tony Moilin, *Paris in the Year 2000*, 1869).

de l'Impératrice.⁸⁰

The spatial manifestation of the enlarged and “secularized” public realm was the growing needs for safe and weather-proofed retailing territories segregated from the streets. As a congested city for a thousand years, Paris in the 19th Century bore witness to two ways in which public space (social space) was created. The first was rational, through Baron Haussmann’s restructuring of the street pattern. The cutting of great boulevards through the heart of a mediaeval city engendered a crowd of freely moving individuals and a network of privileged places along the boulevards over the backstreets. Haussmann’s social control prompted the domination of significant spaces and imagined a kind of “internal class colonization.”⁸¹ The second was more improvised, through the glass-roofed arcades. The building of arcades was also a spontaneous architectural movement. It reproduced a condensed city life and planted seeds for a self-organized ideal community in the capitalist metropolis.⁸²

To Benjamin, the growing number of solitary strollers with the intention to buy and presence of female strollers radically transformed the city into a place of commodity display, entertainment, and sexual pleasure. The stroller, or *flâneur*, was a “reception organ” for Paris,” and it implies a

⁸⁰ Zeynep Çelik, *Urban Forms and Colonial Confrontations: Algiers under French Rule* (Berkeley: University of California Press, 1997) 11-58.

⁸¹ Richard Sennett, *The Conscience of the Eye: The Design and Social Life of Cities* (New York: Alfred A. Knopf, 1990), 41-68.

⁸² Walter Benjamin, *The Arcades Project*, 31. Citation from the *Illustrated Guide to Paris* reads, “Lining both sides of these corridors, which get their light from above, are the most elegant shops, so that the arcade is a city, a world in miniature.” Furthermore, the form of arcades is the most important feature in Fourier’s Phalanstery.

city in collective experience instead of in reality.⁸³ The gas lamps and decorated storefronts cast a murky alleyway between two building blocks as a kaleidoscopic, panoramic urban stage. The differences in ranks and social backgrounds between these strangers were effaced in the roaming crowd. To Benjamin, the Parisian arcades formed a free pedestrian zone where a king and a member of the “petty bourgeois” could be immersed in the same crowd at the same time.⁸⁴ Although they might have nothing in common, in the rambling crowd they were able to hide in a collective identity.

For Richard Sennett, strollers in the arcades were different from those in the 18th Century, when people of different social classes varied in appearance. Yet, in the 19th Century, they were all elegantly dressed and disguised as middle-class people. Such a collective appearance marked the departure of the 19th Century from the 18th Century, or of industrial capitalism from the feudal system of *Ancien Régime* (old regime).⁸⁵ The arcades were replaced by corporate-operated department stores in the late 19th Century when the concept of specialty arose. With mass production and consumption eventually dominating the material life of the public, the sense of originality became a massively produced feature. The department stores eroded “an awareness

⁸³ Dieter Hassenpflug, “Walter Benjamin: Looking at the Dream-Side of the City,” in *Cities in Transition*, Arie Graafland, ed. (Rotterdam: 010 Publishers, 2001), 249. In addition, Benjamin saw the flâneur as “man of the crowd.” They hid in the crowd as strangers, and differences were effaced. Benjamin noted: “Dialectice of flanerie, on one hand, the man who feels himself viewed by all and sundry as a true suspect and, on the other side, the man who is utterly undiscoverable, the hidden man. Presumably, it is this dialectic that is developed in ‘The Man of the Crowd’.”

⁸⁴ Benjamin, *The Arcades Project*, 44.

⁸⁵ Richard Sennett, *The Fall of Public Man*, 16-24.

and knowledge of the city by and through itself.”⁸⁶ The fixity of prices eliminated bargaining, which is “the most ordinary instance of everyday theater in the city.”⁸⁷ The organization of specialties and price fixity reduced what Sennett called the “contested borders” when all differences in personal identities were regulated and flattened in a landscape of commodity display.⁸⁸

As opposed to 19th Century Paris and London, American urbanism in the 20th Century took a new position to resolve the conflict between proximity and the self, or between collective form and individualism. New York Commissioner’s grid plan of 1811 set the blocks at 200 by 800 feet all the way up the length of the island and prefigured a boundless tabula rasa for modern Manhattan. It “neutralized the value of any particular space” and paved the ground for a “gridded city.”⁸⁹ Around the turn of the 20th Century, an advisory commission, including planners, architects, landscape architects, and lawyers was established in New York. Thus, the arrangement of public good was delegated to a disciplinary order imposed on the city.⁹⁰ The skyscrapers which appeared in the late 1800s extended the “gridded city” of the 19th Century to a vertical dimension. The grid “subdues those who must live in the space, but disorienting their ability to see and to evaluate relationships.” Thus, planning the “gridded city” was an exercise of

⁸⁶ Dieter Hassenpflug, 249..

⁸⁷ Margaret Crawford, “The World in a Shopping Mall,” in *Variations on a Theme Park*, ed. Michael Sorkin (New York: The Noonday Press, 1992), 18.

⁸⁸ Richard Sennett, *The Conscience of the Eye: The Design and Social Life of Cities*, 197.

⁸⁹ *Ibid.*, 60-61.

⁹⁰ M. Christine Boyer, *Dreaming the Rational City: The Myth of American City Planning 1890-1945* (Cambridge: The MIT Press, 1983).

“dominating and subduing others.”⁹¹ The families living in skyscraper apartments are permanent guests in a hotel-like setting. In the absence of unpredicted encounters with others, the grid sterilized the public space. People start to be trapped in a “catalogue of domestic routine” which produced “intimate tyranny.”⁹²

The 1916 Zoning Ordinance of New York imposed the height and setback limits for the skyscrapers, creating a wedding-cake architectural style and its related “street valley” as a potential site for public spaces.⁹³ The 1916 Zoning Resolution of New York placed the city under a new regulatory environment, in which land use zoning and building envelope control could be turned into a device for coordinating the public good, such as ventilation, lighting and aesthetic consistency, in a city which would soon be filled with sprouting skyscrapers. On the one hand, the zoning law allowed the building owner to build the maximum volume in a lot according to a shape pre-designed by the code. On the other hand, the building envelope set back at regular intervals and created a volumetric order. Thus, the public sphere became a tangible

⁹¹ Sennett sees the vertical grid, like the horizontal one, as a way to erase the presence of others. Sennett critiques the Puritanism space for it encouraged radical individualism and was impalpable. And “it implied a deep hostility toward the needs of other people, a resentment of their very presence.” The vertical grid also neutralized the value of height. He writes: “In cities of skyscrapers, Hong Kong as much as New York, it is impossible to think of the vertical slices above street level as having an inherent order, like the intersection of *cardo* and *decumanus*; one cannot point to activities that ought particularly to happen on the sixth floor of buildings. Nor can one relate visually sixth floors to twenty-second floors as opposed to twenty-fifth floors in a buildings. Nor do skyscrapers have the necessary height. The vertical grid lacks definitions of both significant placement and closure.” Sennett critiques the Puritanism space for it encouraged radical individualism and was impalpable. Moreover, “it implied a deep hostility toward the needs of other people, a resentment of their very presence.”

⁹² Richard Sennett, *The Fall of Public Man*, Conclusion.

⁹³ Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (New York: Princeton Architectural Press, 1995).

benefit and a specific urban form defined by calculation and measurable terms. Both David Frisby and Richard Sennett observe that the concentration of trading, dwellings, communication, and the emergence of new building forms created a “city rationalized” or a “neutral city” in the early 20th Century, not only accommodating the growing traffic, but also celebrating the dismantling of the conventional public spaces, i.e., streets.⁹⁴

In *Delirious New York*, Rem Koolhaas set forth a “1909 theorem” — the skyscraper as a utopian device for the production of unlimited numbers of virgin sites on a single metropolitan location, and its embodiment in the Downtown Athletic Club.⁹⁵ Each platform of this 38-story structure is devoted to a distinct plot for intensifying human intercourse. The vertical composition of these programs obliterates the human consciousness of height and constitutes an enclosed urban ecology. The Downtown Athletic Club is not merely a skyscraper with repetitive floor plates. It stacks inhabitable, artificial grounds to create a cabinet-like mega-structure. It is a “locker room the size of a skyscraper” and each compartment awaits an unspecific program. Nature is resurrected in the mini-golf course on the seventh floor as one of the skyscraper’s generic

⁹⁴ Richard Sennett, *The Conscience of the Eye*, Chapter 2; David Frisby, *Cityscapes of Modernity: Critical Explorations* (Cambridge: Polity, 2001) , Chapter 7.

⁹⁵ Rem Koolhaas, *Delirious New York: A Retrospective Manifesto for Manhattan* (New York: Monacelli Press, 1978), 83. Koolhaas writes: “A slender steel structure supports 84 horizontal planes, all the size of the original plot...Each of these artificial levels is treated as a virgin site, as if the others did not exist, to establish a strictly private realm around a single county house and its attendant facilities, stable, servants’ cottages, etc. ... The disconnectedness of the aerial plots seemingly conflicts with the fact that, together, they add up to a single building. The diagram strongly suggests even that the structure is a whole exactly to the extent that the individuality of the platforms is preserved and exploited, that its success should be measured by the degree to which the structure frames their coexistence without interfering with their destinies. The building becomes a stack of individual privacies.”

platforms. In retrospect, by simply stacking the floors, the building forms a neutralized urbanity and eliminates exposure to the remainder of the city. The Downtown Athletic Club can be viewed as an equivalent of Walter Benjamin's arcades of Paris in the vertical dimension.⁹⁶

In the C.I.A.M Athens Charter, the public realm was reformulated into spaces of logistics or leisure. Retailing was stripped out of the modernist city or reduced to a function of necessity. Le Corbusier proclaimed in 1929 that the street should become a "factory for producing speed."⁹⁷ His urban vision turned out to be a design standard in postwar town planning. The segregation of vehicular and pedestrian traffic eliminated the possibility of "benign intermingling" between the two.⁹⁸ In general, it created a grid condition which Sennett critiques, for its counteraction to necessary everyday encounters.

Postwar urban renewals radically changed the faces of many global downtowns and, resultantly, transformed the modern city into a circuit board with plug-in tubes. Meanwhile, the malling of city centers led to a "middle-class tyranny on conventional streets."⁹⁹ In the second half of the 20th Century, theme parks and multi-block shopping centers became paradises for citizens looking for a one-stop resort center. Providing a broad range of activities and a festive interior

⁹⁶ Sennett, *The Conscience of the Eye*, Chapter 2.

⁹⁷ Gold, 48.

⁹⁸ John R. Gold, "The Death of the Boulevard," in *Images of the Street: Planning, Identity, and Control in Public Space*, ed. Nicholas R. Fyfe (London: Routledge, 1998), 45.

⁹⁹ Trevor Boddy, "Underground and Overhead: Building the Analogous City," in *Variations on a Theme Park: The New American City and the End of Public Space*, ed. Michael Sorkin (New York: The Noonday Press, 1992), 124-153.

environment, shopping centers obscured the boundary between consumption and production. Mall visitors no longer considered themselves as a group of passive shoppers, but rather producers in a collective role-playing game. Yet, as heavily segregated and guarded spaces, these privately-owned interior streets, or what urbanist Trevor Boddy calls “analogous cities,” are unable to shorten the ever-enlarging gap between the more and the less networked in the age of information and mass-media.¹⁰⁰ As a result of the recent wave of mall developments across the world, particularly in East Asia, public life has been withdrawn from streets to the enclosed shopping gallerias, and has been condensed into a space of infinite potentials.

Retailing space has infiltrated into each corner of Hong Kong, adjoining public transportation in a seamless way. Hence, unlike North American suburban shopping centers, these indoor shared spaces are more integrated into adjacent dense urban fabric, and they extend urbanity into the architectural interior. The “porosity,” as Benjamin called it, within these shopping centers represents the spatiality already in place for decades. Consequently, a new type of public space has been produced by means of blending diverse programs, and blurring the city and architecture. The spatial condition, on which the concept of “the public” in the Enlightenment builds, no longer holds true. The urban surface has been transformed from a natural existence to a totally artificial system composed of diverse programs and transport systems. On the one hand, enormous ambiguous and anonymous spaces, or “peripheral sites” as Alex Wall termed them,

¹⁰⁰ Ibid.

were produced.¹⁰¹ On the other hand, transitional spaces, such as train stations, metro compartments and moving walking ways, have become new public spaces despite not necessarily being owned by the public sectors.¹⁰² Contemporary scholars are trapped in a dilemma in which the classical ideas about the public space will never comply with the emergent reality. The notion of “the public” must be reexamined and open to new interpretations (Figs. 12, 13).

¹⁰¹ Alex Wall, “Programming the Urban Surface,” in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner (New York: Princeton Architectural Press, 1999), 234.

¹⁰² John Urry notes that railway compartments, buses, train stations, airports, and other transportation spaces are where many contemporary public lives are taking place. However, notably in the case of Hong Kong, they might not be owned or run by a public agency, but they intimately engage with the city’s public domain. Urry believes that public spaces of connectedness are public or semi-public in certain senses. First, they are subject to new forms of public regulation. Second, these spaces are open to the members of the public if they have the means to pay. Access is not restricted by reason of ascriptive criteria. Third, there is a public organization of such movement, especially through the publicly available timetabling of such mobilization. Finally, new ways of appropriate behavior in “public” came to be developed, especially within the public places of the station and railway compartments.



Figure 12. Arcades in Paris, 19th Century.

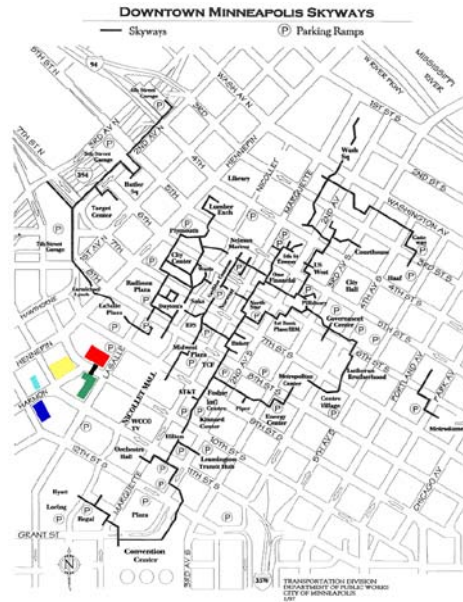


Figure 13. Privately-owned interior streets in Minneapolis.
Source: Transport Division, City of Minneapolis.

5. A Question of Terminology

As previously discussed, there had been a rich literature regarding the prototypes of the urbanity of Hong Kong. However, on the one hand, very few recent studies on Hong Kong exhibited such a broad perspective. On the other hand, the study of Hong Kong policy-making and regulatory framework is usually disconnected from its spatial dimension, indicating a neglect of Simmel's contribution to this domain. Rem Koolhaas remarks in *Great Leap Forward*: "The entire

discipline possesses no adequate terminology to discuss the most pertinent, most crucial phenomena within its domain nor any conceptual framework to describe, interpret, and understand exactly those forces that could redefine and revitalize it.”¹⁰³ Studies on the high-density urbanism in Asian metropolises have emerged profusely in the new century. However, very few of them have been undertaken by academic society as a part of disciplinary knowledge. One reason of this terminological inadequacy is that few of the scholarships can tackle a school of thought about space on the architectural scale. A great portion of the existing texts are fascinated with lavish descriptions of spectacles reminiscent of a dissipated image of capitalism of the 19th Century and early 20th Century. These studies indicate an East Asian identity without specifying how this identity might illuminate the narrative of a more comprehensive and general history of modernity.

The first and foremost problem of existing scholarship is that it respectively belongs to separate fields and disciplines, such as a professional design discourse, the humanities, and sociology. They are even short of channels to converse with each other. Castells laid out the foundation for a general theory of “developmental state” in East Asia’s postwar modernization. This theory is heavily cited and illuminates ensuing scholarships in the field of urban studies, but it rarely addresses the emergent urban conditions on a physical level.¹⁰⁴ For example, amongst these

¹⁰³ Chuihua Judy Chung, Jeffrey Inaba, Rem Koolhaas, and Sze Tsung Leong, eds. *Great Leap Forward* (Köln, Germany: Taschen, 2002), 27.

¹⁰⁴ Manuel Castells, Lee Goh, and R. Yin-Wang Kwok, *The Shek Kip Mei Syndrome: Economic Development and Public Housing in Hong Kong and Singapore* (London: Pion, 1990) .

urban studies of Hong Kong, there are studies on the politics of space (Alexander Cuthbert, Mee Kam Ng), on the cultural landscape of Hong Kong (Ackbar Abbas, Tsung-yi Michelle Huang), on the transit oriented development (TOD)(Robert Cervero and Jin Murakami, Siu Yu Lau), on urban anthropology (Ian Lambot and Greg Girard, Gordon Mathews), on policies and planning history (Roger Bristow, Lawrence Lai), on new ways of representation of the space of Hong Kong (Jonathan Solomon, Barrie Shelton).¹⁰⁵ In contrast, generally speaking, there are very few established works on urban architecture of Hong Kong and they are often considered to be of little academic quality by urban scholars as a whole.¹⁰⁶

Koolhaas' interest in the alternative reality enlightens a plethora of scholarship in the genre of

¹⁰⁵ Alexander Cuthbert and Keith McKinnell, "Ambiguous Space, Ambiguous Rights: Corporate Power and Social Control in Hong Kong," *Cities*, Vol. 14 No. 5 (1997): pp. 295-311. Mee Kam Ng et al, "Spatial practice, conceived space and lived space: Hong Kong's 'piers saga' through the Lefebvrian lens'," *Planning Perspectives*, Vol.25, No.4, (2010), 411-431. Mee Kam Ng, "From government to governance? Politics of planning in the first decade of the Hong Kong Special Administrative Region," *Planning Theory and Practice*, Vol.9, No.2(2008),165-185. Ackbar Abbas, *Hong Kong: Culture and the Politics of Disappearance* (Minneapolis, MN: University of Minnesota Press, 1997). Tsung-yi Michelle Huang, *Walking between Slums and Skyscrapers* (Hong Kong: Hong Kong University Press, 2004). Robert Cervero and Jin Murakami, "Rail and Property Development in Hong Kong: Experiences and Extensions," *Urban Studies*, no. 46(10), September (2009): 2019-43. S.S.Y. Lau et al, "Multiple and Intensive Land Use: Case Studies in Hong Kong," *Habitat International* Vol.29 (2005): 527-46. Roger Bristow, *Hong Kong's New Towns: A Selective Review* (Hong Kong & New York: Oxford University Press, 1989). Lawrence W.C. Lai, and Mark Baker. "The Final Colonial Regional Plan That Lingers On: Hong Kong's Metroplan." *Habitat International* 41, January (2014): 216-28. Barrie Shelton et al, *The Making of Hong Kong: From Vertical to Volumetric* (London: Routledge, 2010). Jonathan Solomon, Clara Wong, and Adam Frampton, *Cities without Ground: A Hong Kong Guidebook* (San Francisco: ORO Editions, 2012).

¹⁰⁶ For those who conduct researches in the field of urban architecture of Hong Kong, Prof. Charlie Xue's (City University of Hong Kong) proposal "A study of Hong Kong urban architecture (1946 - 1997) – exploring the trajectory of modern architecture in the Greater China" (National Science Foundation of China) is the most comprehensive research plan that I have ever known, with regard to the architectural history of Hong Kong after World War II. Prof. Daqing Gu (Chinese University of Hong Kong) has been working on public housing and architectural modernism of Hong Kong. Prof. Pu Miao (University of Hawaii) was involved in a series of research on the public space of Hong Kong.

“cultural studies” of the East Asian metropolises, such as Ning Ou’s study on Sanyuanli, Guangzhou, Ian Lambot on Kowloon Walled City, Jonathan Solomon on the pedestrian environment of Hong Kong, and Gordon Mathews on Chung King Mansion.¹⁰⁷ The works of Solomon, Lambot, and Mathews attend to the urban forms of day-to-day politics due to extreme proximity, with respect to improvised urbanism, contentious developments, mix of businesses, and the representation of trans-national politics in the local environment. Despite the absence of a common disciplinary background, their works excavate the city objects with a combination of physical settings and related social institutions. These studies are based on Hong Kong, but can apply to all intensively built, seemingly ghetto-like communities or spaces in China and other “developmental states” (Castells) of East Asia. Operating on clearly defined physical environments or artifacts, they are searching for an alternative spatial experience. These alternative experiences open perspectives for a more genuine manifestation of modernity and globalization. The “form” in the works can be seen as an integrated part of urban anthropology, an intrinsic component of social relationships. Their works more approach what is referred to as the “sectional city” throughout this dissertation, or a form of day-to-day politics in a sectional fashion. Yet, they still run the risk of losing an overall picture of postwar East Asian history. For instance, in Solomon’s investigation of the three-dimensional pedestrian network of Hong Kong,

¹⁰⁷ See the “San Yuan Li” documentary by Ning Ou. Also see Jonathan Solomon, Clara Wong, and Adam Frampton, *Cities without Ground: A Hong Kong Guidebook* (San Francisco: ORO Editions, 2012); Ian Lambot and Greg Girard, *City of Darkness: Life in Kowloon Walled City* (Haslemere: Watermark, 1993); Gordon Mathews, *Ghetto at the Center of the World: Chungking Mansions, Hong Kong* (Chicago: University of Chicago Press, 2012).

what is still missing is the historical review of the regulatory environment and a review of planning history, which heralds the spatial integration of contemporary Hong Kong. The following chapters will present a more comprehensive interpretation of the planning literature of Hong Kong. The phenomenon of the “sectional city” in Hong Kong should be dated back to a series of colonial plans and transport studies in the 1960s. In summary, one underlying undertaking behind their works is that space is not seen as a silent variable independent from social institutions, but as an active participant in shaping a series of spatial and behavioral codes. The interpenetration between the spatial code (including planning and design regulation) and the unique organization of urban form is yet to be investigated.

Another group of scholars is more concerned with the collective identity or iconicity of the emergent East Asian architectural scene (Non Arkaraprasertkul, Shiqiao Li, Duanfang Lu, Leslie Sklair).¹⁰⁸ Their works passionately discuss the modern history and politics of East Asia, but fall short of analytical frameworks for tackling the deep spatial structure behind a global scene. The “politics” of their texts rather refer to the state or macro politics, and the city is treated as more or less a function of these state politics. These works are more often classified as a school of “Asian studies,” whose connection with the disciplinary knowledge is to be further examined. One key

¹⁰⁸ Non Arkaraprasertkul, *Shanghai Contemporary: The Politics of Built Form* (Saarbrücken: VDM Publishing, 2009). Shiqiao Li, "Chinese Cities as Megacities," in *Representation and Spatial Practices in Urban South Africa*, ed. Leora Farber (Johannesburg: Research Centre, Visual Identities in Art and Design, Faculty of Art Design and Architecture, University of Johannesburg, 2008), 273-85; Duanfang Lu, *Remaking Chinese Urban Form: Modernity, Scarcity and Space, 1949-2005* (London: Routledge, 2006); also see Leslie Sklair, "Towards an Understanding of Architectural Iconicity in Global Perspective," in *Aspects of Urbanization in China: Shanghai, Hong Kong, Guangzhou*, ed. Gregory Bracken (Amsterdam: Amsterdam University Press, 2012). They belong to a large group scholars whose works are sorted as “Asian Studies.”

problem is that state politics are not readily incorporated into disciplinary knowledge as opposed to the day-to-day politics of the built environment. Day-to-day politics defies a simplistic narrative as a derivative of state history.

To conclude, more work should be conducted to consolidate their thoughts into a general narrative of architectural modernity in relation to density, proximity, consumerism, and the public (communal) space. The remainder of the paper tries to reassess these existing studies on the basis of an empirical case study of Hong Kong urbanism. The existing scholarship has loosely defined a discourse, but fallen short of a comprehensive historical narrative to tackle a universal path of modernity. The key points which framed the history and agenda of the Asian vertically integrated developments are unsettled in relation to the modern (postmodern) urban history as a whole. In light of such a critical view, the study can place itself in a better position to communicate the Asian urbanism to an audience within the discipline of architecture and urban design.

Chapter 3. The Hong Kong Section and its Institutional Context

This chapter probes the geographic, historical, and political determinant in shaping Hong Kong's vertical integrated urban form. Throughout this chapter, a broad range of local archival sources and informants has been consulted to delineate the urban history of Hong Kong, particularly the postwar urban growth during the half century from the Chinese Civil War (1946-1949). Since Chapter 2 concludes with a set of concepts and analytical frameworks in relation to the Hong Kong Section as a general metropolitan experience, this chapter starts to apply those analytical tools to critically review the urbanity of Hong Kong in space and history.

It is noteworthy that this chapter serves as a discursive foundation for the following projects on Hong Kong urbanity and its architectural implications (pedestrian networks and vertical shopping centers as two cases). The chapter concentrates on postwar Hong Kong urbanism (1945-1997), particularly the architectural and urbanistic discourse around the late MacLehose Era (1971-1982). It should be noted that the wealth of architectural and urbanistic discourse in Hong Kong is not comparable to that of the metropolises of the West (Paris in the 18th and 19th Century, New York in the 20th Century); however, it is far richer than the previous scholars assumed. The chapter will be focusing on three types of sources: 1) a series of city plans from the Abercrombie report in 1948 to the last colonial plan in 1990; 2) archives and secondary researches on the mass transport; and 3) magazines and journals targeting surveyors, architects, and planners.

I would like to argue that the emergent sectional cities in Hong Kong are the outcome of roughly four determinants: (1) Hong Kong's compact city footprint due to the geographic constraints; (2)

a series of plans for new towns, reclamations, urban renewals, and harbor-airport plans from 1953 to the post-1997 era; (3) advanced public transit systems (bus, ferry, subway) integrated into the dense and porous urban fabric; and (4) pro-business policy and associated urban design code which facilitated the intermeshing of city functions. Throughout this postwar urban history of Hong Kong, the increasingly conscious practices in reconciling density in the sectional dimension can be observed, albeit its documentation in architectural and planning literature is not through a professional design language. In other words, architects or planners rather thought of the knowledge about urban density and proximity as a set of countermeasures to respond to circumstances related to density and congestion. It was not until the 1990s that this knowledge was consciously translated into planning standards and urban design guidelines. Additionally, a part of the knowledge began to further penetrate into the latest vertical retail spaces and transit-oriented developments. Hence, this chapter is devoted to delineating this translation process in the postwar planning history of Hong Kong.

1. Hong Kong History and Urban Geography

Hong Kong Island, or “the City of Victoria,” became a Crown Colony in 1842 after Qing Empire’s (1644-1911) defeat in the first Opium War. It stemmed from a few shanty villages on the water’s edge along the Victoria Harbor to provide a temporary residence for the traders. In 1898, with the Convention for the Extension of Hong Kong Territory signed by the Qing government, the colony expanded to the south bank of the Shenzhen River. For 100 years after its cession to Britain, Hong Kong was solely a mid-size trading post on a barren island, whose importance was rarely acknowledged by the British Empire. Due to the colonial rule, Chinese and Europeans lived in largely segregated localities. Europeans lived in the reservations in

Central, Mid-levels and Kowloon, and hardly had any contact with local Chinese beyond their servants and housekeepers.

Hong Kong was by nature a pro-business city before the handover in 1997 founded on trade and commerce. As the *Hong Kong Preliminary Report* (also known as “Abercrombie Report”) states, “the Colony in its chief function is an entrepot port.”¹⁰⁹ This prominent city function even persisted into the era after the handover in 1997. The mission of the Hong Kong government is to put into practice what had been proven to be practicable with minimum government interference. Moreover, Hong Kong people, as if they were volunteer employees of a large company, were intended to live in a corporate environment which minimized the cost and time in commuting and circulation. Such a corporate culture constituted the institutional context of the urbanity of Hong Kong.

Traditionally, most of the population and associated development of Hong Kong was concentrated on the north shore of Hong Kong Island and Kowloon Peninsula. The three territories (Hong Kong, Kowloon, and the New Territories) comprise very mountainous terrain, serpentine coastlines, and a good natural harbor. This physical context has some significant implications. First, it has given rise to a spatial pattern in which major developments concentrated around both sides of Victoria Harbor against a dramatic mountain backdrop.

¹⁰⁹ Patrick Abercrombie, *Hong Kong Preliminary Report* (Hong Kong: Government Press, 1948), 4.

Second, the complex topography has funneled the outlying settlements into valleys, water edges and reclaimed land with the mountain ranges providing the natural landscape background. Third, the mountain ranges give Hong Kong a number of distinct vantage points, such as the Victoria Peak in Hong Kong Island and the Lion Rock in Kowloon. Ridgelines of the mountain became a commonly accepted guide to control the city profile defined by skyscrapers in later urban design control.

Suffering from a severe shortage of land, Hong Kong carried out piecemeal reclamations from 1853 to 1948. The concept of large scale reclamations for urban housing and industrial uses was proposed by Sir Patrick Abercrombie in his report prepared for the Hong Kong government in 1948. Over the 50 years from 1948, more than 3,400 ha of new land were created.

Fundamentally, all of the land in Hong Kong is held by the Hong Kong colonial government (or HKSAR after 1997), since the major portion of the territory was literally leased from the Qing Government in 1898, and the lease would expire in 1997. The leasehold basis of land sales resulted in a unique land development pattern of Hong Kong, which will be further taken up in Chapter 4.

By and large, Hong Kong's survival as a Crown Colony was incessantly prone to the changing geo-political realities across the border. In 1949, the victory of the Chinese Communist Party exerted severe threats to the survival of Hong Kong as a colony and unleashed tides of refugees to Hong Kong. Prior to the Chinese Civil War (1946-1949), Hong Kong was solely of modest importance compared with other prosperous treaty ports on the east coast of China, especially the much more successful Shanghai. For the first time during a state of peace, from May 1950, crossing the border with China required a visa. The Civil War and, resultantly, the control of the

border turned Hong Kong into the most important location for connecting to Communist China. Meanwhile, Hong Kong officials felt that they had the responsibility to “preserve British imperial power when it was ebbing away” in the wave of decolonization.¹¹⁰ Additionally, when the refugees from the mainland kept crossing Shenzhen River and squatted across the territory illegally, the inhabitable land of Hong Kong in the 1950s was not able to sustain such a swelling population.

What embarrassed the Hong Kong government and radically changed the course of modernization in Hong Kong were two historical events: the Shek Kip Mei Fire in 1953 and the 1966-1967 leftist riots. The Shek Kip Mei Fire was not a single fire, but a whole series of large squatter fires that destroyed the immigrants’ shantytowns in Hong Kong throughout the 1950s.¹¹¹ The after-effects of the fire and the riots were: 1) the town planning division was reconstituted; 2) massive low cost resettlements were planned to accommodate the urban poor; and 3) public housing and urban renewal programs were launched to respond to the social turmoil associated with the two events. Amidst these measures, the reconstitution of the planning division was made to ensure that the town planning team was kept firmly in touch with events involving land development. In the 1960s and 1970s, town planning in Hong Kong had to cope with essentially two major problems: 1) the critical shortage of developable land; and 2) a high population

¹¹⁰ Alan Smart, *The Shek Kip Mei Myth: Squatters, Fires and Colonial Rule in Hong Kong, 1950-1963* (Hong Kong: University of Hong Kong Press, 2006), Chapter 3.

¹¹¹ *Ibid*, Chapter 1.

growth rate, particularly caused by immigration.¹¹² The interplay of these countermeasures made Hong Kong one of the most densely populated cities in the world.

After the Chinese Civil War, which ended in 1949, Hong Kong became a refuge which received more than one million immigrants (mostly illegal) from Mainland China who were suffering social turmoil and poverty.¹¹³ The immigrants who poured into Hong Kong during this period were very different from those sojourners temporarily transgressing the border since the early days of colonization. These new immigrants, who successfully escaped Communist rule, formed a crowd. This crowd was young (as opposed to Hong Kong's aging population today) and restless, clustering in cubicles inside substandard tenement flats or shanty towns. Housing shortages and public health problems became a serious concern for the colonial government in the 1950s. Posterior to an enduring political joust between the Communist regime and the KMT in Taiwan, and as well as its resultant riots between the leftists and the rightists, Hong Kong inhabitants began to perceive their land as an independent territory to be protected by the colonial order. Even if the first generation immigrants from the "Chinese Diaspora" continuously experienced a social and cultural dislocation under the colonial governance, in the 1970s, the

¹¹² Hong Kong Town Planning Division, *Town Planning in Hong Kong*, 1984.

¹¹³ As late as 1949, the border between Mainland China (then Republic of China and later People's Republic of China) was not definitely demarcated. The New Territories was a buffer zone between Hong Kong and China before Hong Kong's New town plan was launched. Shenzhen River cut through a few existing villages, and there was no rigorous border control. Roughly, there are 650 acre paddy fields within the boundary of Hong Kong, which belong to villagers of Shenzhen. Many border villages still have closed zones. Sha Tau Kok is a typical old border town riding on the Hong Kong and Mainland boundary. Under this circumstance, an accurate assessment of the local population was almost impossible in 1949. According to Abercrombie's report in 1948, the total population of Hong Kong was about 1.5 million, with 1 million urban population in Hong Kong Island and Kowloon, 0.3 million in the New Territories, and 0.2 million on floating junks.

“refugee mentality” was converted to an emerging civic self-consciousness following the watershed 1966–67 political riots.¹¹⁴ Along with this political shift, colonialism gradually gave way to a benign governance, which greatly relieved the tension between various social classes and ethnic subgroups (European settlers, Cantonese, Hakka, Shanghainess, etc.). Gradually, an experience of strangerhood was superseded by a sense of belonging in the early 1980s. Hong Kong Chinese became Chinese of an overseas city state. Meanwhile, with arising optimism about technology and engineering, professionals and technocrats held an attitude which considered all social problems to be demographically grounded and fixable in a technical sense.

The total population of Hong Kong had increased dramatically from 3.1 million in 1961 to 5 million in 1981. In 1970, 75% of trips in Hong Kong were made by public transport: 54% by bus, 14% by train, and 11% by ferry.¹¹⁵ Car ownership in Hong Kong has been relatively low compared to other global cities. The city has been heavily reliant on public transport. A series of infrastructural programs radically changed the topography of Hong Kong. First, the Kowloon-Canton Railway terminal was relocated from Tsim Sha Tsui to Hung Hom in the 1970s,

¹¹⁴ Gordon Mathews, Eric Kit-wai Ma, and Tai-lok Lui, *Hong Kong, China: Learning to Belong to a Nation* (New York: Routledge, 2008), 22-39. A shift from the “refugee mentality” of the 1950s and 1960s to the “market mentality” of later decades encouraged the new immigrants to stay away from the politics of national loyalties, which became extremely problematic after the 1945-1949 Civil War. While the later “market mentality” was rather based on professionalism, self-satisfaction and affluence, the “refugee mentality” was rooted in poverty, and the struggle for daily economic survival. However, both of them are two sides of one coin, which constituted a secularized liberalism. Mathews et al. further discuss four interrelated aspects of the “refugee mentality.” First, the “refugee mentality” was a conscious attempt to stay away from political tensions created by rivalry between the communist and nationalist regimes. Second, it was an acceptance of the status quo in colonial Hong Kong. Third, this “refugee mentality” was a survival instinct. Fourth, “the refugee mentality” involved a sense of transience and rootlessness.

¹¹⁵ Ibid.

resulting in more intensive developments on water edges of the north shore of Victoria Harbor. Second, a cross-harbor tunnel was conceived and built in 1972. Third, the first metro line was opened in 1979. Fourth, the dismantlement of the Kai Tak airport was conceived, and a new airport started to be constructed in the early 1990s. These infrastructural programs exerted a significant impact on the development pattern of the metropolitan district of Hong Kong.

Hong Kong became a modern world city under the administration of Murry MacLehose (1972-1981) around the 1970s, thanks to the demographic restructuring and a sequence of progressive social betterment movements¹¹⁶. Therefore, the administrative and ideological structure of Hong Kong experienced a drastic change. With the constitution and reconstitution of many professional institutes and other statutory bodies established within the Hong Kong government (including architects, surveyors, and town planners), technocrats and professionals of different backgrounds penetrated into the day-to-day management of Hong Kong, resulting in a government privileging the logics of the market, professionalism, and engineering over other social dimensions. Over three decades after the Shek Kip Mei Fire and the constitution of a planning division (later the Planning Department), Hong Kong was turned into a city with great “thickness,” a city with a deep podium structure composed of advanced transportation infrastructure and brand new townscape. A mid-century colonial city of mid-rise tenement buildings (Tong Lau) was quickly superseded by highway interchanges, flyovers, tremendous

¹¹⁶ These social betterment movements differ in scope and time, but roughly cover the postwar era. They include the anti-corruption movement, compulsory education, cleaning Hong Kong movement, etc.

new settlements, cross-harbor tunnels, skyscrapers, and multi-block shopping centers linked by elevated pedestrian networks¹¹⁷ (Figs. 1, 2, 3, 4).



Figure 1. Map of Hong Kong, 1870.

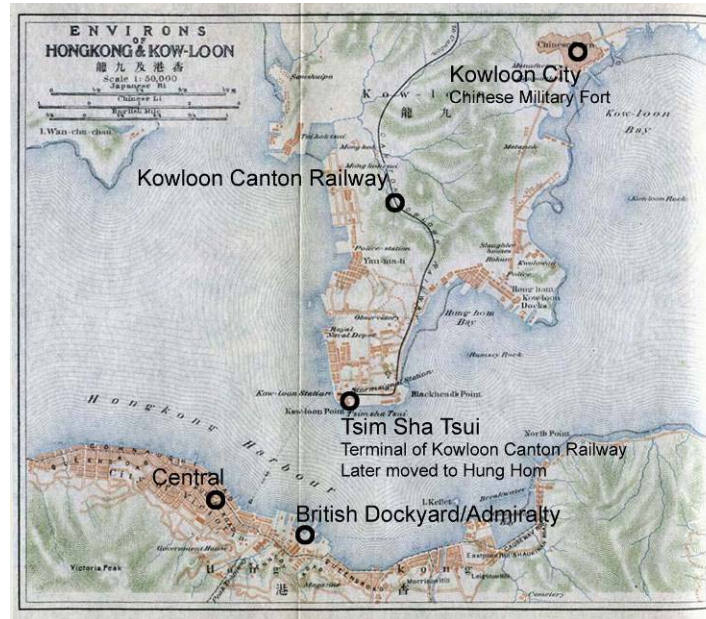


Figure 2. Map of the City of Victoria (Central) and Kowloon, 1915 (era of the Republic of China). Before 1950, most development in Hong Kong concentrated around Victoria Harbor.

¹¹⁷ “Tong Lau,” or “Chinese buildings,” are those mid-rise tenement buildings which were built before the mid-20th Century. They are not equipped with elevators, sometimes also without running gas. The whole ground floor of a Tong Lau is reserved for small locally-oriented businesses, usually grocery stores or pawnshops. The Tang Laus built before the World War II have cast-stone arcades (sometimes arched) on the street front. Tong Lau style is typical to South China, including Haihan, Guangdong (Canton), and Macau.

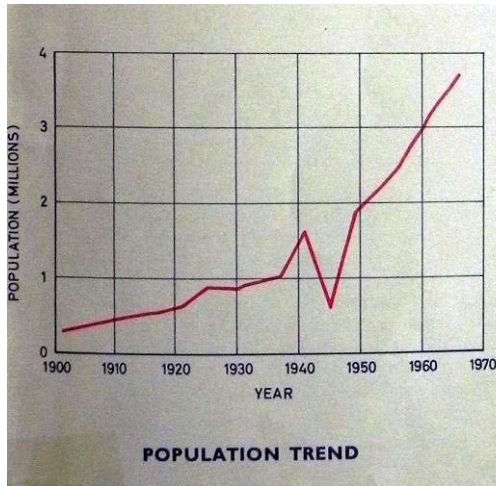


Figure 3. Population growth of Hong Kong, 1900-1970.
Source: Hong Kong Mass Transport Study, 1967.

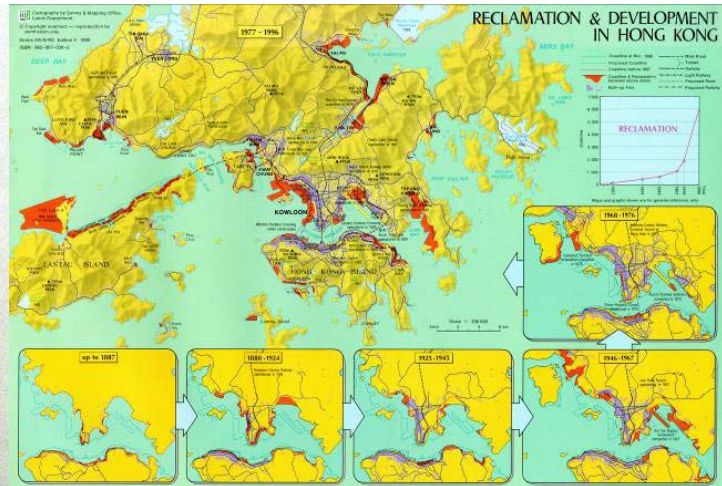


Figure 4. Reclamation and development in Hong Kong from 1887 to 1996.
Source: Hong Kong Survey and Mapping Office.

Wah Fu – Hong Kong’s first self-contained low-cost estate

View from north towards town centre and flats completed under phase II

Far East BUILDER, March 1970

HONGKONG HOUSING AUTHORITY
D. LIAO, B. Arch, Dip LD (Diploma)
CHEUNG SING-HOI, B. Arch (HK)

Developers
Commissioner for Housing
Housing Architect

bounded on three sides by the sea. The total site area of the scheme is 29 acres and the population density is 1,855 persons per acre. By utilizing space on various levels within the buildings, together with recreation areas between the buildings, it has been possible to provide almost one and a half times the total estate area for recreation, play space and other leisure activities, free of traffic and encumbrances.

Apart from its pedestrian-only areas, Wah Fu embodies a number of new advances in the low-cost housing field – both in the facilities it provides and in the design of its multi-storey blocks.

It is for example the first Housing Authority estate to incorporate not just a few shops but a complete town centre to meet the commercial and social needs of the residents and to make the estate self-contained.

Multi-storey garages are another new feature, introduced in an attempt to solve the ever increasing problem of parking without sacrificing recreation space. The garages are so designed as to provide easily accessible playgrounds on the roofs.

Another special facility is the setting aside of 23 flats for more than 100 elderly people. The scheme, set up with the co-operation of the Social Welfare Department and Hong Kong Christian Service, is the first of its kind in Hong Kong.

The housing units – with living space allocated on the basis of 35 sq.ft. per person – are contained in 23 blocks ranging in height from eight to 24 storeys high.

Twin towers

Phase IV, now nearing completion, entails almost half the total accommodation in four twin-tower blocks of a new design. In these blocks, 34 flats with balcony access are grouped around a square light well, 50ft. x 50ft., and two of these squares are

Wah Fu Estate site plan

Far East BUILDER, March 1970

Figure 5. Hong Kong’s first low-income satellite settlement, Wah Fu.
Source: Far East Builder, March 1970.

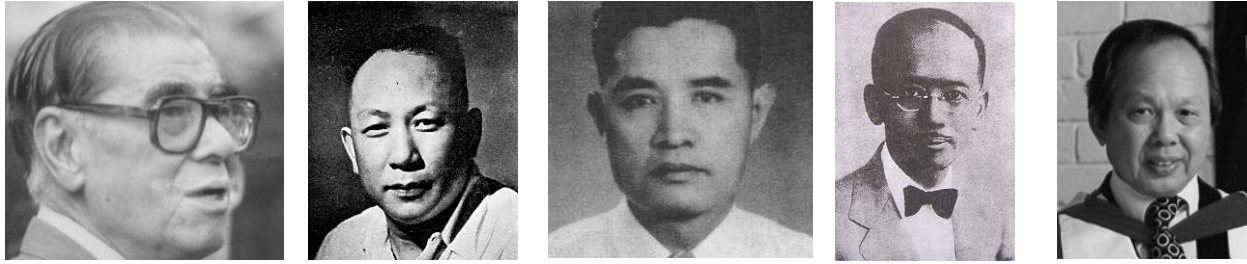


Figure 6. The first generation Chinese architects practicing in Hong Kong. From left to right: Eric Cumine, Su Gin Djih, Luke Him Shau, Fan Wenzhao, and Szeto Wai.

2. Towards Integrated Development

2.1 British Influence and Local Minds

The earliest history of institutionalized planning began with the enactment of the Town Planning Ordinance in 1939. It was in this ordinance that the standards of health, safety, convenience, and general welfare of the community were first announced. As a Crown colony, the development of Hong Kong's built environment was more or less involved in the overall context of the urbanism of Commonwealth states. Yet, few details have been provided for the way in which the postwar British planning concept was disseminated to Hong Kong. Reading from the planning literature in the 1960s and 70s, it reveals that Hong Kong planners undertook comprehensive civic design as the path this port city should take. "Role models" such as Barbican or Cumbernauld were carefully studied by Hong Kong planners in terms of their provision of a self-contained pedestrian environment and easy access to communal services. Although references to planners, such as Sir Patrick Abercrombie, Colin Buchanan, Alison and Peter Smithson, William Holford, and Gordon Cullen appeared from time to time in planning documents and architectural discussions, planning ideas of these influential figures do not consolidate into a conscious urban

design doctrine applicable to the context of Hong Kong.¹¹⁸ Instead, borrowing concepts, approaches, and models from British town planning in the 1960s, Hong Kong has been very skilled in addressing urban problems due to overcrowding. These skills can hardly be observed in the town planning practice in Britain.

Literally speaking, Hong Kong is not a city of *ad hoc* urbanism, notably after the reconstitution of the Town Planning Board in 1960 and a sequence of housing programs to relieve the hazardous overcrowding. Before Patrick Abercrombie was invited by the Hong Kong government to prepare the *Hong Kong Preliminary Planning Report (1948)* in 1947, for the first time, a Town Planning Office was constituted within the Department of Public Works. Sir Patrick Abercrombie's *Hong Kong Preliminary Planning Report* in 1948 hardly changed the planning practice of Hong Kong in the following decade. With hindsight, the Abercrombie report in 1948 rarely grapples with concrete development or redevelopment plans.

At this moment, roughly three groups of professionals constituted Hong Kong's architectural

¹¹⁸ The major Hong Kong planning documents which I refer to in my research include: Patrick Abercrombie, *Hong Kong Preliminary Planning Report* (1948); Department of Public Works, *City of Victoria: Central Area Redevelopment* (1961); Hong Kong Crown Lands and Survey Office, *Colony Outline Plan* (1969); Freeman, Fox, Wilbur Smith and Associates, *Hong Kong Mass Transport Study* (1967); Hong Kong Town Planning Division, *Town Planning in Hong Kong* (1984); Planning Department, *Metroplan: The Foundation and Framework* (1990); Planning Department, *Metroplan: The Selected Strategy; Executive Summary* (1991); Planning Department, *Metroplan: The Selected Strategy; An Overview* (1992); RMJM & Planning Department, *Urban Design Guideline for Hong Kong* (2002). Planning Department, *Hong Kong Planning Standards and Guidelines* (2005). Currently, Hong Kong's planning system comprises development strategies at the territorial level, and various types of statutory and departmental plans at the district or local level. Guiding the preparation of these plans is the Hong Kong Planning Standards and Guidelines, which included relevant development-related policies, principles, and community views. Notably, many plans that I reviewed were made before the planning system of Hong Kong came to maturity.

intelligentsia. The first are those European (mostly British) architects and planners who practiced in Hong Kong, worked for the government agencies, or taught in the University of Hong Kong. The dean of the Faculty of Architecture, W. G. Gregory, was their representative. The second group included architects that were a part of the immigrants pouring into Hong Kong after the outbreak of the Chinese Civil War. Many of them already established their reputation in Shanghai, Nanjing and Tianjin, such as Eric Cumine, Szeto Wai (司徒惠), Luke Him Shau (陸謙受), Su Gin Djih (徐敬直), and Robert Fan (范文照). The third group comprised locally-educated architects and surveyors, who did not earn recognition beyond Hong Kong, but were nevertheless influential in Hong Kong's local practice. Chau & Lee Architects & Engineers (Chau, Yiu Nin & Lee, Richard, 周耀年&李禮之) was amidst this group.¹¹⁹ The postwar generation was then superseded by emerging younger technocrats in the late 1960s and 1970s. Locally-trained professionals began to stage their expertise in the MacLehose Era. This new generation grew up in a peaceful environment, more identifying themselves as Hong Kong people rather than refugees. In general, the Hong Kong architects and planners of this period played a role as part of the new "knowledge class" of Hong Kong.¹²⁰ Given the absence of universal franchise and the integration of private capital within the government, a great amount

¹¹⁹ Traditionally for Chinese the family name *precedes* the given name. In local Hong Kong literature usually the Chinese given name precedes the first without a comma. It is standard for the Chinese to address one another with full names. Even in formal literature in English, a comma between the full name and the given is not necessary. In addition, Eric Cumine was born in Shanghai and his father was from Scotland. He is seen as a local Hong Kong architect rather than a foreigner. He speaks Shanghainese, Cantonese and English fluently.

¹²⁰ Alexander Cuthbert and Keith McKinnell, "Ambiguous Space, Ambiguous Rights: Corporate Power and Social Control in Hong Kong," *Cities*, Vol. 14 No. 5 (1997): pp. 295-311

of discretionary power is at the disposal of local technocrats. Professions, in the form of trade unions, existed as quasi-government organizations. Additionally, the government itself was the largest employer of the “knowledge class.” The planning and housing sectors of the Government are composed of a large group of specialists. For instance, Donald Liao(廖本怀), a University of Hong Kong graduate, who was responsible for the design and construction of Wah Fu Estate and later became the director of Housing Authority, is the representative of the architects working for the state (Figs. 5, 6).

2.2 “Environmental Area”: Civic Design in the 1960s and 70s

In general, as early as 1960, the quality of “environment” became a pressing concern for Hong Kong planners and architects, when the city was on the cusp of becoming a metropolitan area served by mass transport systems.¹²¹ As discussed in Chapter 2, the concepts of “environmental area” and “traffic architecture” belong to a set of urban design theory created by British planner Colin Buchanan in *Traffic in Towns*. To Buchanan, “Environmental areas” are grade-separated, car-free pedestrian decks, riding over the motorways or public transit. They adjoin adjacent retail establishments, offices, and recreational spaces in an integrated pattern. Starting from the late 1950s, the Hong Kong government began to prepare a series of more detailed city plans, such as

¹²¹ Throughout the planning documents of Hong Kong, the term “environment” refers to heterogeneous concepts and objects in different contexts. Fundamentally, the idea of “environment” is closely related to urban design as an arising discipline. In many documents after Colin Buchanan’s *Traffic in Towns* was published, “environment” or “environmental area” often signifies a well-designed precinct for free pedestrian movement. This “environmental area” could appear in the form of a shopping arcade or a cluster of interconnected retail galleries, grade-separated from the motorways.

Central Area Redevelopment, and *Colony Outline Plan* (later renamed as *Hong Kong Outline Plan* in 1974) as an executive plan to guide the development of the metropolitan area of Hong Kong. The 1960s is an era when planners' concerns about the quality of urban environments were publicly voiced. In 1959, the Hong Kong Town Planning Board was called for by the governor to prepare a redevelopment plan for a 76-acre parcel of land released from the Royal Navy and War Department, and from land reclamation. Eric Cumine, one of the most influential architects of Hong Kong, was involved in the preparation of this study. This study was released in 1961. On the flyleaf of the report, British town planner Gordon Cullen's remarks on city design were quoted:

A city is more than a given pattern of streets into which buildings are fitted, it is more than a traffic problem. It is a living balance of forces, forces of history, character, use and abuse, of commerce, wealth and poverty, of internal invasion and defense. Redevelopment should, at the least, take note of these secret tides to see whether their power is comparable with the scale of the development. If so then they should be respected and absorbed into future arrangements so that the emerging city may be vitalized.

-Gordon Cullen, "Nash, Brash and Soho" in the *Architects Journal*, September, 1960 ¹²²

Evidently, the 1961 *Central Area Redevelopment* was inspired by post-war British planners' growing interest in environment and space, as opposed to architecture. The expressions of

¹²² Department of Public Works, *City of Victoria: Central Area Redevelopment* (Hong Kong: Government Printer, 1961).

“living balance of forces” and relational “invasion and defense” represented their fascination with the complex urban scenario in day-to-day lived experience. The north bank of Hong Kong Island, then “the City of Victoria,” was already a center for commercial, professional, administrative, and cultural activities around 1960. Inarguably, the 76-acre new development would reassert the existing urbanity of Central as a venue of competing building uses and social forces. The Town Planning Board wished to ensure that “crowdedness does not deteriorate into congestion” and “confusion does not become chaos.”¹²³ In 1960, Central was a commercial center as much as a logistical center, due mainly to the vast mail-handling work of the General Post Office and the ferries (including the Star Ferry and the Vehicular Ferry). Temporarily without a mass transit system, most commuters took buses or ferries to enter into Central. To the planners, Central was in need of a car-free zone, grade-segregated from the automobile traffic. Therefore, the 1961 *Central Area Redevelopment* suggested that an elevated pedestrian deck be built, at a height of 19 feet above the ground, to cover Central and the Dockyard (now Admiralty). This system was proposed to connect the ferries, bus terminals, car parks, and the proposed Dockyard developments, as an extension for Central’s high commercial value. In 1960, there still existed large patches of wooded landscape in the land of the War Department and the Dockyard (today Admiralty and Hong Kong Park). Hong Kong still had an opportunity to create a broad outdoor pedestrian deck close to the harbor and nature. Unfortunately, such an idealistic vision would inevitably conflict with a high plot ratio (7.5 for the Dockyard and 7.7 for Central).

¹²³ Ibid.

Meanwhile, few private businesses would be accountable for the maintenance of such a large outdoor space and the public facilities for supporting it. Thus, a large elevated pedestrian deck proved to be unviable in this case. However, later developments, usually dominated by the Mass Transit Railways Corporation, relies on revenue-producing properties to finance this proposed pedestrian deck in a way of “value capture,” turning the conceptual pedestrian decks into multi-story retail podiums. The first two developments adopting such a strategy are the Admiralty Center and the World-Wide House, both built by Cheung Kong Holdings in agreement with the Mass Transit Railway Corporation. The details of the retail-transport integration will be discussed in the next section.

In addition to proposing an “environmental area,” the 1961 *Central Area Redevelopment* also profiled the circulation pattern of contemporary Central and Admiralty, and prescribed some urban design codes which continue to take effect today. The 1961 Central Redevelopment plan contains far more detailed design guidelines than the Abercrombie report in 1948. However, the plan was overly optimistic on the goal “design for the people rather than machines.” Not limited to the generous proportions of the open plazas, buildings and pedestrian decks, the 1961 plan prescribed an urban form which turned out to be too idealistic for a capitalist city saturated in a wave of feverish growth. This idealism and optimism coincided with the vision of postwar modernism in Europe and North America, which faded away in the 1970s.

Roughly in the 1960s, Hong Kong had exhibited a new physical scale which starkly contrasted with the fine-grained urban fabric as a vestige of the lease sales in the early 20th Century. The government funded low-cost housing project completed in the 1960s presented a self-contained urban form. It not only provided housing, but also diverse communal amenities in an accessible

manner. The Wah Fu Estate is the largest state-funded housing project of this kind. It has a “town center” which provides a community hall, market, shops, a library and public school, all accessible from a multilevel deck integrated into the sloping site conditions. In recognition of this emerging scale, urbanist Jon A. Prescott (then president of the Hong Kong Institute of Architects), in his article “Hong Kong: the Form and Significance of a High-Density Urban Development,” (1971) invoked Jean Gottmann’s study of the “Northeast Megalopolis” (1961) for considering the path of Hong Kong. In this light, he suggested that Hong Kong should take a lineal or spinal pattern based on public transportation, and the town centers be built as “environmental areas” around major terminals.¹²⁴ In 1966, there were a few building code amendments which changed the typical building envelope from a “wedding cake” model to the new “podium-tower” model, so as to provide more open space or amenities in the enlarged podium structure. However, due to the fragmented lot subdivision and the Asian-style mixed-usage development, many private developments were unable to take advantage of this new building regulation. Usually, owners built the structural shells plus services awaiting further subdivision by tenants. Residential, commercial, and even light industrial usages were intermixed in one building. Inarguably, before new approaches and institutions were introduced, the private owners had no vision or competency to fulfill such a mission of comprehensive planning. Like many planners who believed in British-style rational planning in the 1960s and

124 Jon A. Prescott, “Hong Kong: The Form and Significance of a High-Density Urban Development,” in Dwyer, D.J., ed. *Asian Urbanization: A Hong Kong Casebook* (Hong Kong: Hong Kong University Press, 1971), 11-19.

70s, Prescott was seeking “opportunities” for comprehensive restructuring and more economic returns in relation to a “megalopolis,” instead of a group of separate settlements. Prescott was interested in two “opportunities”: reclamation and public transportation. Only the reclamation and mass transit railways could bring a scale for radical urban restructuring and leverage the social resources for the purpose of a new high-density urbanism, an “overall megastructure.”¹²⁵

The MacLehose Era is a watershed which split the urban history of Hong Kong into two periods. The former is a port city composed of fragmented private developments, with a colonial government unwilling to participate in comprehensive urban planning. The latter is a megalopolis, composed of self-contained commercial complexes or new towns, connected by sound public transportation. Such a turn did not occur over one night. By European or American standards, Hong Kong did not have a comprehensive land-use planning system. Comprehensive planning was implemented as independent redevelopments at the disposal of land owners or the Housing Authority. Wah Fu Estate and Mei Foo Sun Chuen were two exceptional instances of such kind of development, respectively built by the Mei Foo Investment, Ltd. and the Housing Authority. In the case of Mei Foo Sun Chuen, the site at Lai Chi Kok (western end of New Kowloon) was planned to contain one hundred 20-story buildings comprising more than 12,000 apartments arranged in groups. Mei Foo Sun Chuen set up a new model for private residential development when public housing standards were higher than the private ones in the 1970s. Thus, Mei Foo Sun Chuen can be seen as an equivalent of Wah Fu Estate in the private market. One

¹²⁵ Ibid. 16.

feature of the project is the podium one story above ground, which produced a solution by entirely separating pedestrians from vehicles. What was new to private residential development in the 1970s was an agreement reached with Government whereby the developers agreed to provide a relatively complete system of maintenance of the estate. This undertaking was intended to bind on any successor in title to the company for the life of the lease. This agreement ensured that the estate was not only built like a self-contained community, but would be maintained as one. Likewise, in the state-funded project Wah Fu Estate, near Aberdeen, a multilevel town center offered magnificent views and community amenities. Towers were grouped in such way as to make the best possible use of the site for open spaces (as landscaped podiums). Both Mei Foo Sun Chuen and Wah Fu Estate had car parking spaces below the podium and beneath the buildings, with direct and convenient access from the podiums. As opposed to the new towns in the New Territories, Wah Fu Estate and Mei Foo Sun Chuen are located in the urban area of Kowloon and Hong Kong Island. Their scale and internal communication is inadequately related to the traditional subdivision pattern of Hong Kong. Ensuing residential projects which can compete with them (especially Mei Foo) include Oi Man Estate at Ho Man Tin and (public housing), Whampoa Garden at Hung Hom Bay (built by Hong Kong and Whampoa Dock Co.) and Taikoo Shing (built by Swire Properties) completed in the 1980s. Wah Fu and Mei Foo sites are part of the experimentation conducted by Hong Kong's rising technocrats before the Mass Transit Railways Corporation took the lead of urban restructuring. They define a dimension and anatomical framework through which the spatial integration of Hong Kong should be studied.

In addition to residential developments, commercial development in the "City of Victoria" obtained its momentum in the 1970s. In 1975, the stage one plan of the Central Redevelopment, a part of Hong Kong Land's HK\$600 million Central Redevelopment Scheme, was approved.

The complex was composed of several towers and an outdoor plaza (Statue Square) and an indoor atrium (the Landmark). Existing planning literature hardly indicates how the 1961 plan survived in the as-built plans of the 1970s' developments. It turned out that Alexandra House, the first stage of Hong Kong Land's Central Redevelopment Scheme, had a basement area which will form part of the Mass Transit Railway development. In comparison with rail-property developments (R+P) in the 1990s, such as International Finance Center (Hong Kong Station) and Union Square (Kowloon Station and the International Commerce Center, or ICC), the new metro station had not yet added new spatial elements to the overall design of Hong Kong Land's business complex. Only in developments of such scale, large indoor atriums could be afforded as interior landscaped open spaces and as an extension of the subway concourses. Notably, the concept of multilevel "environmental areas" became popular in the 1970s, not limited to commercial or residential complex. Hong Kong Polytechnic University is the first campus complex to have a car-free, elevated podium covering most of its site. However, without institutional configuration, or without a set of compulsory urban design guidelines for statutory plans, such vertical integration was at the disposal of designers' or owners' good wills. As Prescott observed, most private owners were not able to take advantage of the increasing scale of urban restructuring. The absence of a political or social "pride of place" and a desired short-term return related to Hong Kong's blurry political prospect in the 1970s, as Prescott mentioned in 1971, is one of the reasons for the missed opportunities in comprehensive urban design¹²⁶ (Figs.

¹²⁶ Ibid. 18.

7, 8, 9).

2.3 Public Transport and Rail-retail Integration

In the late 1960s, the piecemeal development on the periphery of the urbanized area of Hong Kong could not meet the growing needs of housing, commerce, and industry. The Hong Kong government began to embrace a more systemic way to balance density on the entire territory of Hong Kong. Abercrombie recommended that satellite towns be built in his 1948 report. A series of satellite settlements (although not literally a “new town”), such as Kwun Tong and Wah Fu Village, were built in the far east side of the Kowloon Peninsular and the south corner of Hong Kong Island. In 1973, the Territory Development Department was established. More developments were thus diverted to outlying areas across the paddy fields and reclamation areas of the New Territories. At first, the government concentrated on three new towns in the New Territories: Tsuen Wan, Castle Peak (later renamed as Tuen Mun) and Sha Tin (Sha Tin), marking the commencement of a progressive new town plan and a stretching mass transit network. Plans for Sha Tin and Castle Peak (Tuen Mun) were conceived as early as 1960. The first Outline Development Plans for Sha Tin New Town and Castle Peak New Town were approved in the mid-1960s, when the government faced pressing demands for private developments and public housing.

Before mass transport was planned in Hong Kong, Hong Kong built a compound motorway system across the metropolitan area. The growing mobility starkly changed Hong Kong people’s commuting pattern which once heavily relied on ferries connecting Kowloon Peninsular and Central. Ferries, in spite of low operation cost, were eventually phased out, or just served the purpose of sight-seeing. A vast network of transportation guided the urban growth of Hong Kong

in step with the rapid urbanization. The new town plan, officially commencing in 1973, turned Hong Kong into a cellular city stitched together by means of expressways. One might marvel at the fact that before the subways started to enhance the spatial quality of Hong Kong, the whole metropolitan area had already been connected by a well-developed motorway system. Hence, the later subway and associated developments are one of the infrastructural systems added up to the emerging three-dimensional circulation pattern.

As the Hong Kong population rapidly grew in the 1960s and more residents were relocated to the outlying new towns, the existing bus and tram lines on the surface road system quickly became obsolete. Under this circumstance, the London Transport Board and Road Research Laboratory were invited to advise the Hong Kong government on problems of public transport. A study on mass transport was completed by a British consulting firm, Freeman, Fox, Wilbur Smith, and Associates in 1967. The principle recommendation of this study was that a 40-mile rail rapid transport system be built to relieve the burden on the surface roads. Four separate lines were designed: (1) the Kwun Tong Line; (2) the Tsuen Wan Line; (3) the Island Line; and (4) the Sha Tin Line. These lines were routed so as to penetrate into the most densely inhabited areas of Hong Kong. Due to Hong Kong's steep mountainous topography, both underground and overhead systems were recommended, with convenient passenger interchanges to serve the maximum number of passengers. Notably, most of the suggestions made by this study were to meet various transportation demands of the design year, 1986. The proposed routes and associated capacities were based on a set of data analyses to forecast a commuting pattern of 1986. With the privilege of hindsight, the population growth of Hong Kong proved to be slower than the 1967 study suggested. The sharp drop of immigration growth in the 1980s coincided with the reform of Mainland China, which evidently held back the immigration tide to Hong

Kong.

The 1967 study also advises that a vertically zoned and integrated development area be built around the stations. It suggests that the mass-transit stations be the nucleus for clusters of new developments, and the most intensive developments have direct access to the stations.¹²⁷ A larger community center was suggested to be built above the station. The mezzanine of the train station was designed to be an underground or overhead street between the rail and the surface road, carefully aligned with existing or future retail arcades, offices, apartment towers, schools, community services, and car parks. At about the same time, along with the new town plan and the transport study, the organization of a multi-level development pattern was written into *Colony Outline Plan (Hong Kong Outline Plan)* released in 1969, as a guideline for future planning practice. *Colony Outline Plan* suggested that a new approach to land use planning and development be called for so as to allow for a greater degree of “vertical integration” of urban functions, which “already exist(ed) in a haphazard form” in many districts of Hong Kong. Most private owners in this period only built the structural shells and provided service facilities of a building, and awaited the future tenants to fill the space with their subdivisions. Complex layering and interpenetration of different functions were accommodated through constant and contingent adaptation. Planners, mostly educated in the West, were fascinated with such a living style of mixed usage. However, at the same time, they saw such chaos as the cause of many

¹²⁷ Freeman, Fox, Wilbur Smith and Associates, *Hong Kong Mass Transport Study* (Hong Kong: Government Printer Hong Kong, 1971), 78.

urban ills, which should be exploited under firm control.

Throughout the 1970s and early 1980s, Hong Kong underwent a ruthless expansion of infrastructure. A cellular urban pattern was, in due course, developed in Hong Kong, with the absorption of British town planning ideas adapted to local conditions. The size of these cells ranged from new towns (Sha Tin and Tuen Mun) down to self-contained residential estates or business complexes (Hong Kong Land's Central complex and the Wharf Holding's Ocean Terminal). Roughly in the late 1970s before the Sino-British Joint declaration, Hong Kong became a global city featuring advanced transport systems and a high living standard.

Remarkably, at the same moment, the city could boast a relatively compact urban footprint. It was in this era that Hong Kong began its transition into an engine of capitalism when the Mainland was barely beginning to survive the aftershock of the disastrous Cultural Revolution.

After the first subway line was put into use in 1979, the Hong Kong Mass Transit Railway (MTR) launched a financing strategy oriented to "value capture."¹²⁸ As early as 1978, MTR and Cheung Kong, Ltd. announced the details of two R+P developments (joint development) by taking advantage of the air spaces above two stations: Central and Admiralty. In 1985, East Point

¹²⁸ Robert Cervero and Jin Murakami. "Rail and Property Development in Hong Kong: Experiences and Extensions." *Urban Studies*, no. 46(10), September 2009 (2009): 2019-43. MTR's "rail plus property" model is one of the best examples of applying the "value capture" principle to finance railway investments. Usually, the price of land near railways stations is generally higher than elsewhere. The operator (MTR) can recover the cost of investing in rail transit and even obtain a profit from property development. One of the MTR stations, the Tsing Yi station, featured a typical "rail plus property" model. It ends up with a mixed-use Maritime Square boasting a seamless integration between the railway, the shopping center, and the residential towers above the retail podium. In contrast to people's assumption, MTR does not receive any cash subsidies from the Hong Kong government to build railways infrastructure. The subsidies were given in the form of a land grant.

Center at Causeway Bay was completed and opened, with the first Hong Kong Branch of Japan's Sogo department store chain. The new commercial complex comprised two basements integrated with MTR's Causeway Station. Simultaneously, the year after the Sino-British Joint Declaration was signed, MTR and Grammap, Ltd. announced plans for property development at five sites along the Island Line: Fortress Hill, Tin Hau, Wanchai, Sheung Wan, and Western Fruit Market. These developments were originally agreed to by the MTR and the consortium in 1981, with piling work for all sites done as part of the subway line construction. MTR were responsible for the foundation work and for supervising the progress of development; the consortium was responsible for the superstructures and had already paid MTR a lump-sum for the completion of the foundations and stations on the five sites. After completion, MTR would take a 25% profit from the development and the rest would go to the consortium. Most sites took a podium-tower form, with residential and office towers sitting on a podium of retail stores and car parks.

Before the sale of the air spaces, MTRC was responsible for preparing the master plan and resolving all interfaces between the commercial developments with the railway facilities. The integration of commercial developments and station boxes changed the way in which the paid and unpaid areas were coordinated. Normally, the station box is constructed within the confines of the existing road alignment. The internal pedestrian circulation within the station is divided into two zones: a paid zone and an unpaid zone. This typical layout has proved to be relatively easy to construct, as the basic modular form of the box, within its right-of-way, is unaffected by the surrounding pattern of development. However, this layout allows little flexibility for commercial activities. The success of the Island Line prompted all stakeholders to cooperate in closer integration of the system with the urban fabric. The narrow corridor along the north shore of Hong Kong Island and the density of street grids forced the line alignment to be confined in an

extremely stringent condition. Hence, the Island Line tended to take a new approach for the layout of the paid and unpaid area. The station platforms were constructed within enlarged sections of the bored running tunnels. The station passenger handling and fare payment areas were contained within the basements of new commercial buildings adjacent to the track alignment. The unpaid zone was intended to function as an extension of the commercial development. In the case of East Point Center at the Causeway Bay site, the two basements had two metro concourses, each with paid and unpaid areas. To avoid structural transfer, the column grids for the 25-story commercial buildings above one concourse basement were pre-designed to comply with the platform layout.¹²⁹

Eventually, the MTR started to hold shares of shops, housing estates and, in many cases, the entire shopping center within the station catchment area or directly above the stations (basically one or a few mega-structures covering a superblock). The retail-rail model catered to the commuting fashion of Hong Kong and greatly improved the quality and experience of commuting. Additionally, with such a rail-retail model, the MTR was empowered to provide an affordable and quality service, which greatly subsidized Hong Kong people's travelling costs. This sort of give-and-take principle is widely implemented in Hong Kong in different spatial and social agreements between public sectors, business owners, and space users. Moreover, what sustains such a collective urban form is a lifestyle obscuring the public and the private, as if the

¹²⁹ J. Burrows, "Integration of Commercial Developments with Mass Transit Facilities," *Asian Architect and Builder*, 1981(?).

inhabitants do not live in independent flats of a condominium, but rather cubicles within an extensive clan. This high-density living culture continued to function in Hong Kong's postmodern transformation into a retail and tourist mecca.

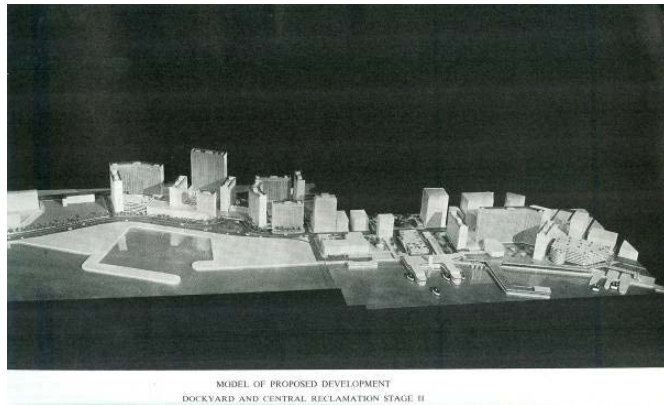


Figure 7. Model of proposed development at Central and Dockyard, 1961.
Source: *Central Area Redevelopment*, 1961.



Figure 8. Stage one of the Central Redevelopment conducted by Hong Kong Land.
Source: *Asian Building and Construction*, February 1975.

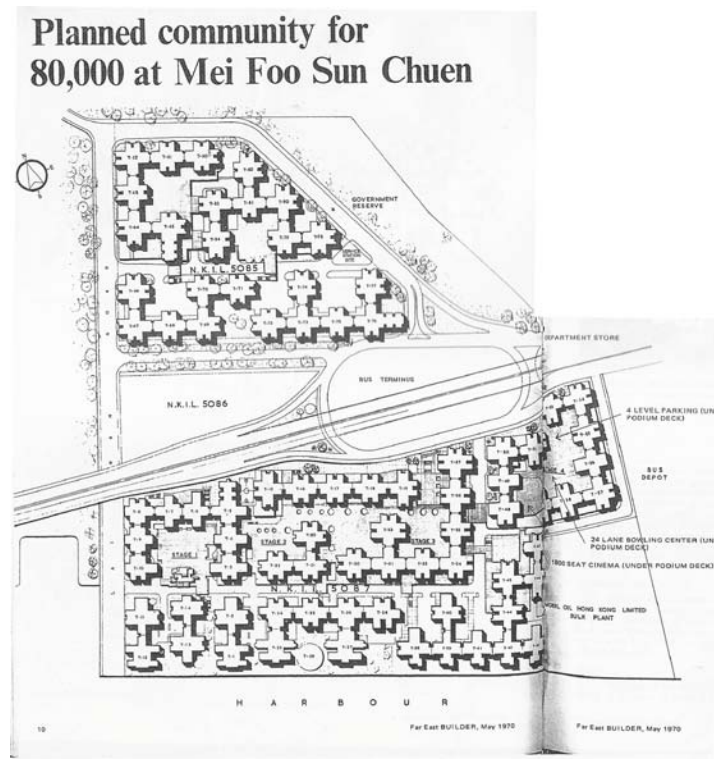


Figure 9. Master Plan of Mei Foo Sun Chuen, 1970.
Source: *Far East Builder*, May 1970.

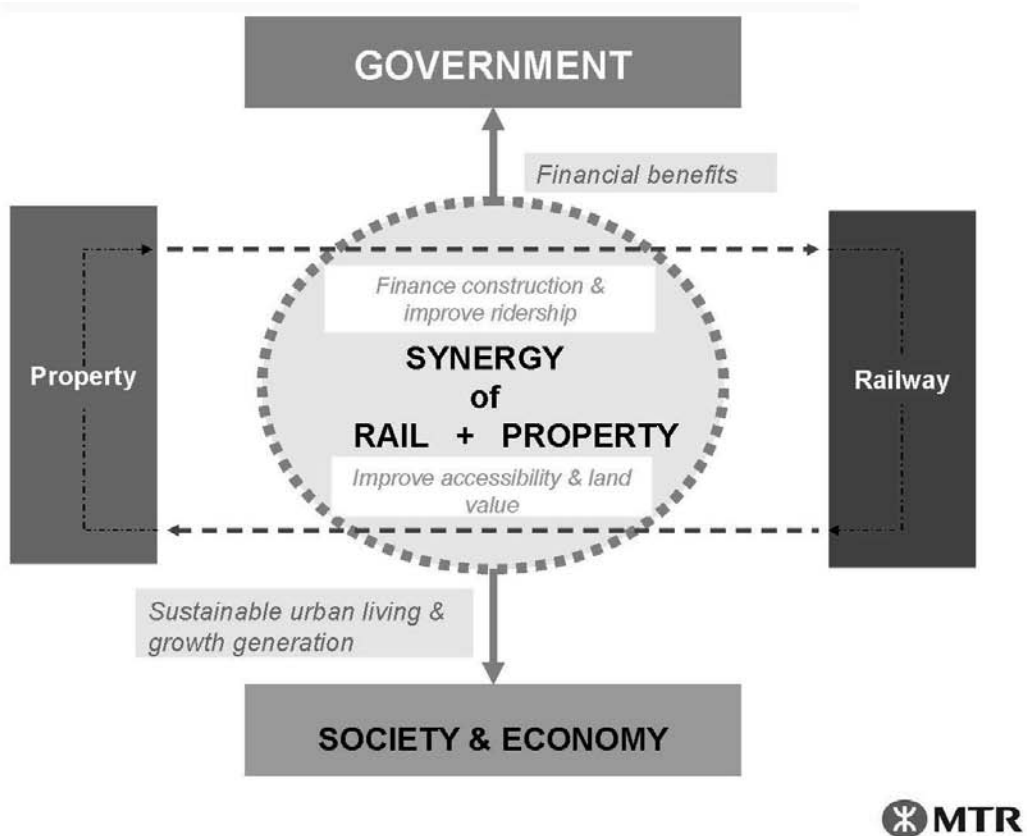


Figure 10. A diagram showing the institutional structure of the rail-property development
 Source: MTR.

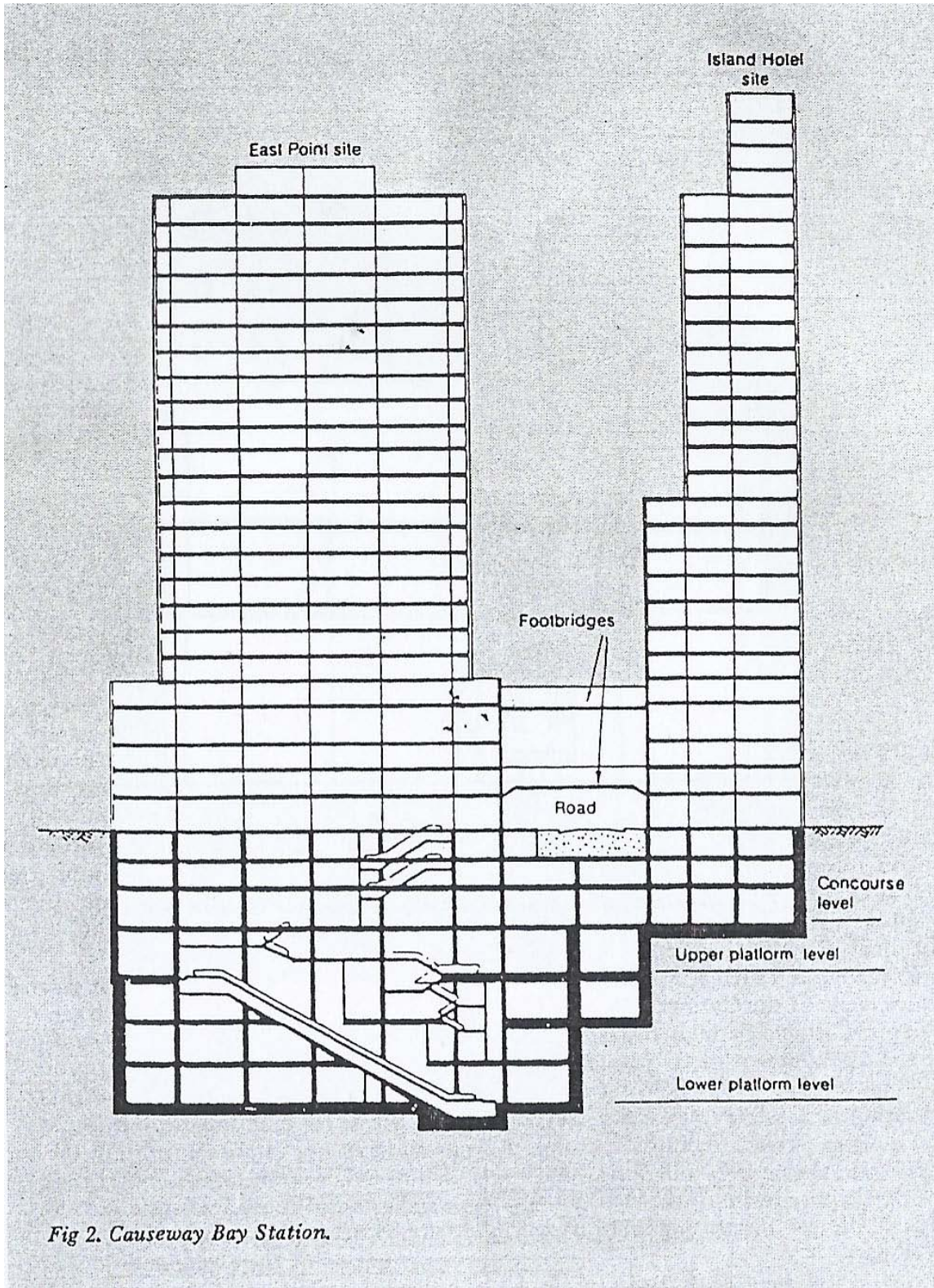


Fig 2. Causeway Bay Station.

Figure 11. Section of East Point Center at the Island Line's Causeway Bay station.
 Source: J. Burrows, "Integration of Commercial Developments with Mass Transit Facilities," *Asian Architect and Builder*, 1981(?).

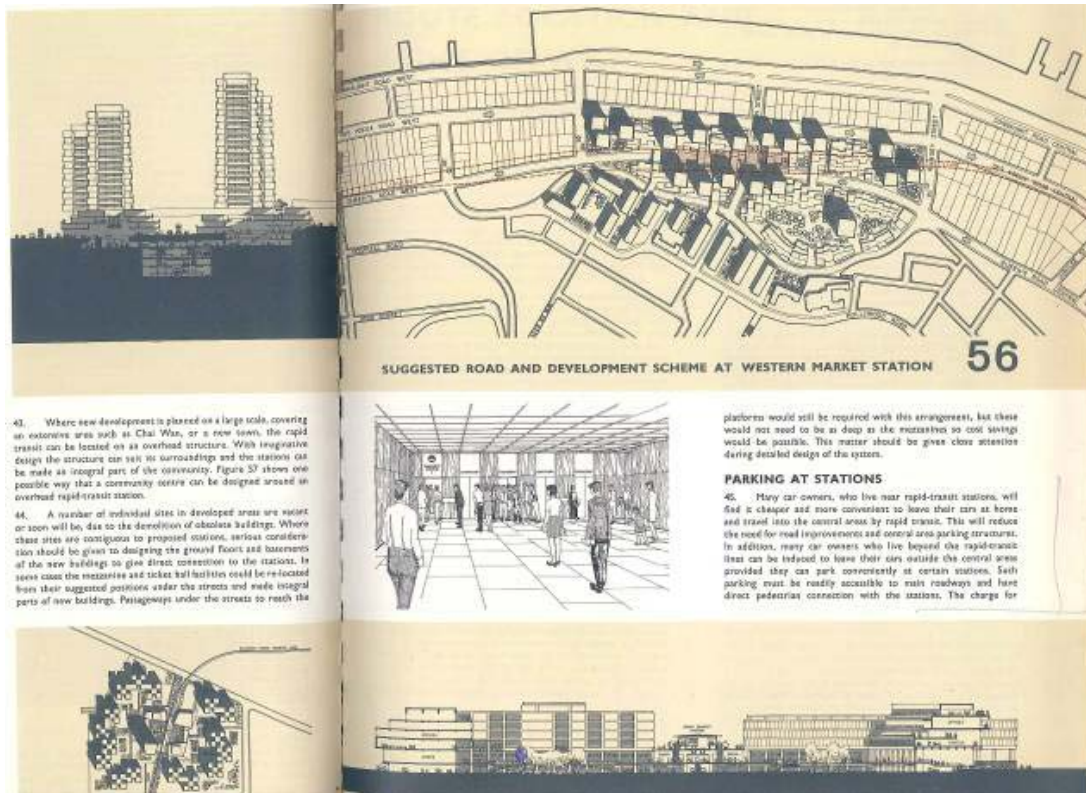


Figure 12. Subway alignment and station-property integration suggested by the *Hong Kong Mass Transport Study* (1967).

Source: *Hong Kong Mass Transport Study* (1967).

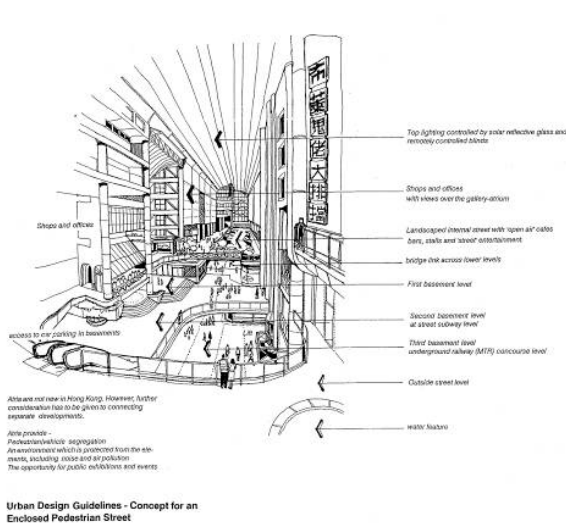


Figure 13. Urban design guideline, concept for an enclosed pedestrian street.

Source: *Metroplan: The Selected Strategy; Executive Summary*, 1991.



Figure 14. Port and airport development strategy.

Source: *Metroplan: the Foundations and Framework*, 1990.

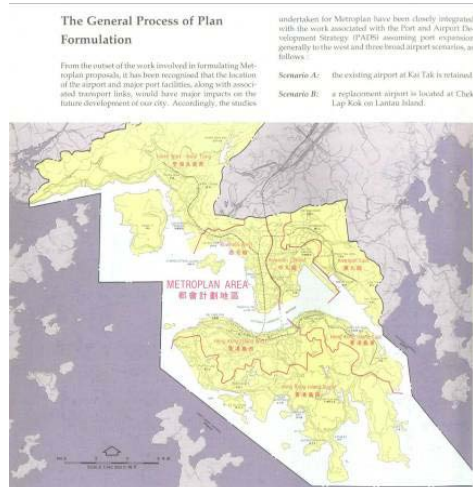


Figure 15. The metropolitan area of Hong Kong.
Source: *Metroplan: the Foundations and Framework*, 1990.



Figure 16. Sketch concepts for special sites, *Metroplan*.
Source: *Metroplan: the Foundations and Framework*, 1990.

In the decades before the transfer of sovereignty over Hong Kong, the government of Hong Kong launched a proactive program in transportation planning and construction. The Second Comprehensive Transport Study (CTS-2) was made in the late 1980s, which significantly uplifted the public's expectation for transportation services.¹³⁰ In 1999, the Third Comprehensive Transport Study (CTS-3) was released. This study recommends an integrated approach taking into account land-use and environmental planning in order to minimize the need for travel. Walking is considered an important transport mode and that facilities for pedestrians need to be incorporated into transport and land-use planning. Pedestrianization, together with grade-separated and safe pedestrian facilities can help reduce the number of short motorized trips,

¹³⁰ The first CTS was prepared in 1976, based on the Hong Kong Mass Transport Study (1967).

increase mobility, and benefit the environment. CTS-3 recommends that future population and employment centers should be placed in the vicinity of metro stations served by integrated pedestrian systems and other transport feeder services to maximize the usage of railways. In addition, this report recognizes that walking is an important mode and that facilities for pedestrians need to be incorporated into a transport plan.¹³¹

The policy of granting property development rights to MTRC was set forth as an initiative to finance the mass transit development when it was established as a statutory corporation in 1975. In 1999, the Financial Secretary announced a proposal to privatize a substantial minority share of MTRC, then a state-owned entity. The land-granting policy continued after the privatization. Moreover, unlike normal real estate developers, MTRC is required to take social responsibilities, if needed, as a semi-state corporation. In the event that public interest and transport policy require MTRC to develop commercially unviable rail projects on social and economic grounds, government is intended to bridge the gap so that these projects can provide a commercial return. Such support must be separately identified and justified publicly, but could take the form of property development rights or contribution to railway infrastructure (Mass Transit Railway Bill). Property development has made an important contribution to the financial viability of MTRC's rail projects. MTRC has played a useful role in the property developments over its railway

¹³¹ Liang-Huew Wang, *An Analysis of Hong Kong Transit City* (Beijing: China Architecture & Building Press, 2014), Chapter 2. Also see Transport and Housing Bureau of Hong Kong, "Third Comprehensive Transport Study Final Report," retrieved August 19, 2014, <http://www.thb.gov.hk/eng/psp/publications/transport/studies/sts2.htm>.

stations and has established new communities along the railway footprint. It undertakes planning for the property developments, building a substantial part of the foundations and providing other common amenities and services. As Prescott anticipated in his 1971 article, mass transit turns out to be the leading force for funneling developments to the vicinity of metro lines. The mass transit network creates a “thick” mat integrating the adjacent superstructure closely with the infrastructure as a whole (Figs. 10, 11, 12, 17).

3.4 Metroplan and Mediated Cityscape

In general, Hong Kong stuck with a rational planning strategy as opposed to an incremental planning strategy, despite the former one falling out of favor in Britain in the 1970s due to the conservative political shift under Prime Minister Margaret Thatcher’s administration.¹³² Unlike Singapore, which has a far more authoritarian government, Hong Kong’s rational planning did not count on the power of government to implement the proposed urban visions. Instead, the *laissez faire* economic policy of Hong Kong existed side by side with a top-down administrative system. An indiscriminate way of taking up the modernist planning approaches, as well as the statutory and non-statutory planning standards, ensured that land development was occurring in accordance with a set of overall guidelines.

Saturated in a tradition of rational planning, the Hong Kong government began to prepare a set

¹³² Lawrence W.C. Lai, and Mark Baker. “The Final Colonial Regional Plan That Lingers On: Hong Kong’s Metroplan.” *Habitat International* 41, January (2014): 216–28. “Host master” was used in the colonial governmental files, yet it is not the correct term in the context of modern international relationship.

of last colonial plans, including *Metroplan* and *Port and Airport Development Strategy*, shortly after the Sino-British Joint Declaration was signed in 1984. The full details of *Metroplan* were documented in a few printed brochures in 1990. The purpose of the preparation of *Metroplan* was to raise a new urban pattern of Hong Kong before the handover of sovereignty. It called for a comprehensive urban design system to coordinate and inform the land reclamation and infrastructural development in the most resource-effectively way. It should be noted that in hindsight, *Metroplan* seems rather the outcome of a brainstorm, a collection of disconnected approaches, alternatives, options and urban design guidelines, rather than a rigorous strategic plan awaiting further implementation step by step. It targeted a plethora of goals which did not cohere to each other. For instance, the reclamation proposal and the down-zoning of many waterfront areas, for the sake of creating more open spaces, were unrealistic and made no market sense.¹³³ As a non-statutory plan (literally an “administrative” plan in Hong Kong’s planning literature) *Metroplan* testifies to the maturity of Hong Kong’s urban consciousness in the late MacLehose Era. For the rest of the 1990s, *Metroplan* guided the selection of public sector projects and also acted to coordinate private projects at a district level. However, due to reclamation’s multiple impacts on the harbor environment and the real estate market, the restructuring of the waterfront, especially along the Victoria Harbor, has slowed down recently due to a strange alliance of the harbor protection movement and some interested developers. It

¹³³ Ibid, 223.

tightened the tension between land shortage and the ever-increasing business intensity.¹³⁴

The completion of *Metroplan* was almost concurrent with *Port and Airport Development Strategy (PADS)*, published in 1989. *PADS* provided a conceptual planning framework for the future development of port facilities and timely reservation of land for those facilities. Both *Metroplan* and *PADS* attempted to divert the infrastructural and real estate investment in the MacLehose Era along these development corridors, roughly the bay area around Victoria Harbor and the lineal axis of the new airport express line. *Metroplan* was prepared to safeguard and enhance the *status quo* global standing of Hong Kong in the post-1997 era as the city might encounter unpredicted instability under the Chinese regime. The development corridor along the new metro lines stuck with the integrated development model along the existing metro lines (such as the East Point Center previously mentioned) and brought this model to a larger scale. Podium developments, usually covering a larger catchment area, were subsequently built above all major interchange stations, such as Hong Kong Station, Kowloon Station, Olympic Station, Tsing Yi Station, and Tseung Kwan O Station.

Although actual building outcomes turned out to be different from the intended forms, *Metroplan* and *PADS* are the last top-down colonial plans before the handover in 1997. It marks both an end

¹³⁴ Peter Cookson Smith, "Central Wanchai Reclamation," *Planning & Development* 12, no. 2 (1996): 10-28. *Metroplan* is not merely based on meeting single-minded development objectives, but represents a means of strengthening Hong Kong's future economic role in the region. *Metroplan* raises a sequence of land reclamation plans which turned out to be overly ambitious and unrealistic. These include the West Kowloon Cultural District plan, the Kowloon Bay plan, and the Central and Wanchai reclamation plan. The expansion of existing nodes and commercial centers in Central and Wanchai is an important policy of *Metroplan*, with Hong Kong's continuing shift towards a tertiary sector-led employment structure.

and a beginning. On the one hand, in the post-1997 era, the over-corporatized government of Hong Kong was unable to bridge the growing gap between the traditional “knowledge class” (technocrats) and the grassroots’ dissatisfaction with the corporatized government. Thus, the uneasy implementation of *Metroplan* indicates the end of modernist comprehensive planning. On the other hand, the government failed to harness the private development market, which has deviated from the vision of welfare state set by the technocrats in the 1960s and 70s. Therefore, at the level of physical planning, consumerism escaped a modernist shell and embraced a new organizational form closely related to postmodern culture in the United States.

Compared with the 1961 *Central Area Redevelopment*, *Metroplan* is far more respectful of the arising local planning knowledge and public participation. In the preparation of *Central Area Redevelopment*, a group of elite architects and planners in the Town Planning Board took full responsibility for the final draft plan. Above all, *Metroplan* was the outcome of a collective brainstorm contributed by numerous practitioners covering a plethora of fields: planning, design, engineering, property development, and financing. Over 30 years beginning in 1961, many multinational, full-service consulting firms began to set up local offices in Hong Kong. These full-service firms, usually involving landscape architects or urban designers, were more readily commissioned for working on large-scale urban redevelopments with infrastructural elements, addressing social issues which could not be handled by architects or planners in the 1960s. For instance, consulting firms, such as Maunsell (1970, now a part of AECOM), Edmond Bull Corkery (1979, first in partnership with Yuncken-Freeman, lastly integrated into Hassell), and Urbis (1977) played or continue to play an influential role in shaping the urbanism of Hong Kong. Landscape architects’ contribution greatly integrated buildings and infrastructure into the topography of Hong Kong. Landscape architects were involved in the design of public housing

schemes and master plans for new towns, such as Sha Tin, Tuen Mun, Tai Po, and Fan Ling. Compared with architects, landscape architects were more skilled in adjoining infrastructure, land form, and buildings as a whole. This tendency is evident in the planning of Sha Tin and Tuen Mun, in which the multi-block town centers were designed to be an extension of a continuous pedestrian surface, implying an urban vision of vertical integration. These examples will be further explained in detail in Chapter 4.

In a large sense, *Metroplan* constellates many site-specific approaches and spatial planning objectives. It was inspired by past achievements and experiences rather than a critical reflection of missing opportunities, given the imminent handover of Hong Kong in 1997. In addition, the preparation of *Metroplan* was made in a period when Chinese real estate elites in Hong Kong (e.g., Cheung Kong, Sun Hung Kai) emerged as a major driving force in urban development. Local entrepreneurs were at last in a position to challenge the traditional economic priority of the European elite. Local architects greatly benefited from this change, as Chinese developers were more willing to work in conjunction with architects who spoke their mother language. At last, along with the rise of Chinese developers, arose a more localized planning culture distinctive from the British tradition in the 1950s and 60s.

Metroplan foresaw a tendency in which the metropolitan area of Hong Kong was rapidly becoming an entirely mediated landscape. It equalized the outdoor and indoor, the buildings and land form, the public and private, and the substructure and superstructure. *Metroplan* turns sporadic experiences concerning “podiumization” into urban design guidelines. With a deeper integration between the city and consumption, Hong Kong was about to be metamorphosed from the inside. Moreover, *Metroplan* encouraged the decentralization of industries from the

congested city centers to the neighboring mainland cities, such as Shenzhen and Dongguan. It welcomed more commerce and tourism amidst an ongoing tendency of deindustrialization, making Hong Kong more susceptible to the turbulence of a global market. Therefore, in China's reform era, Hong Kong was no longer an economically independent entrepôt, as it was in the MacLehose Era, but a service and consumer center integrated with the Pearl River Delta, as an overworking heart catering to a disproportionately enormous body. The restructuring of the Central and Kowloon Peninsula was concurrent with Mainland China's "Open Door Policy." Thus, with ever-increasing internal connectivity and external accessibility, Hong Kong is obliged to compete with the geographical and political constraints which are hindering Hong Kong's further growth in volume and capacity (Figs. 13, 14, 15, 16).



Figure 17. Author's diagram comparing the sectional organization of: (1) Hong Kong Station and IFC complex; (2) Union Square, Kowloon Station; (3) Langham Place, Hong Kong; and (4) Hung Hom Station. It shows how infrastructure, retail, towers, motorways, and bus terminus are vertically integrated.

3.5 Urban Design Guidelines

As the former discussion indicates, *Metroplan* turns sporadic experiences concerning “podiumization” into urban design guidelines. The rise of urban design in Hong Kong can be seen as the disciplinary implication of planning practice in building a consciousness of urban design. The concept of urban design in Hong Kong rapidly developed in the late 1980s and 1990s. “Urban Design and Landscape Framework” of *Metroplan* provides a visual framework and guidelines for three-dimensional design of the urban form of Hong Kong. Posterior to the transfer of sovereignty in 1997, the authority of HKSAR, almost abandoning the *laissez faire* policy, became more involved with infrastructural and urban renewal programs. The mood of city boosterism was channeled into the “Ten Major Infrastructural Projects” (advanced by Chief Executive Donald Tsang) and a series of urban renewal programs with the reconstitution of the Urban Renewal Authority. The Hong Kong Planning Department completed a study which was published as *Urban Design Guidelines for Hong Kong (UDG)* in 2003. *UDG* defined urban design as the process of “giving design directions to the relationship of buildings and space in response to social and economic forces that impinge upon the city at each stage of its development.”¹³⁵ The design guidelines included development of height profiles, waterfront development, cityscapes, pedestrian environments, and mitigation against noise and air pollution

¹³⁵ Planning Department, *Urban Design Guideline for Hong Kong* (2002).

from road traffic. Urban design control of Hong Kong has been both restrained and enlightened by an environment of super-density and proximity. Saturated in a pro-business atmosphere, urban design control in Hong Kong is driven by a concern for measurable market interests more than considerations of people's experience and esthetic needs. Such practices fostered a design culture highlighting measurable effects and pragmatic speculation.

Urban design control in Hong Kong is related to city plans, but its regulation and management is operated under a series of frameworks which do not necessarily correspond to each other. This dissertation will return to this assumption because the regulatory environment of urban design determined many physical aspects of Hong Kong's social spaces. The significance of urban design in Hong Kong surfaced when the Hong Kong government started to react to a set of specific social crises in the 1960s: immigration and squatting, social turmoil, and land shortage. In the MacLehose Era, town planning still referred to the broad application and administration of various controls over individual buildings in matters such as site coverage, shadow areas, and plot ratios. Urban design, as a part of this administrative function, was understood as a more conscious way of planning the building relationships to produce certain practical and aesthetic effects.

Urbanist Alexander Cuthbert argues that urban design in Hong Kong is only a set of mandates facilitating capital accumulation in the physical space.¹³⁶ To Cuthbert, the "urban" space of

¹³⁶ Alexander R. Cuthbert, "The Landscape of Capital." Conference paper submitted to the Symposium on

Hong Kong became the space of collective consumption, functionally zoned or monolithically conceived. It was thus transcribed into the formation of lease conditions in “a pre-determined morphology.” Chinese architectural historian Shiqiao Li reached a conclusion that Hong Kong’s unique history “has created conditions for it to become a city of maximum quantities, with heights, density, and proximity to be pushed to the limit.”¹³⁷ Hence, the codes and regulations are intended to ensure maximum economic interest for private land owners and reconcile developments. Aesthetic quality and the public good are rarely attended to by the government due to a *laissez faire* ideology. Urban design is a professional practice, subject to the doctrines of the market, engineering, and statistics. It was not until the publishing of *Metroplan* (1990) that the urban design guidelines became a day-to-day practice in Hong Kong town planning, in spite of the absence of a supreme state agency for supervising the practice of urban design.

The existing framework and mechanisms related to urban design control of the built environment in Hong Kong are practices under a variety of administrative and legal devices.¹³⁸ At the statutory level, first, one of the principal devices of urban design control is the various lease conditions. All of the land in Hong Kong is held on lease from the government. Government

Urban Design held by the Hong Kong Institute of Planners. Hong Kong: University of Hong Kong, Centre of Urban Studies and Urban Planning, 1985, 21. Cuthbert’s impression of “public space” is still entrenched in the Renaissance model of gardens and squares, in a typical European urban vision viewing the city as a democratic production of supreme human talent and artistic ingenuity. Cuthbert, like many Western intellectuals, is so obsessed with the bemoaning of a cultural loss in this colonial harbor city.

¹³⁷ Shiqiao Li, "Chinese Cities as Megacities," in *Representation and Spatial Practices in Urban South Africa*, ed. Leora Farber (Johannesburg: Research Centre, Visual Identities in Art and Design, Faculty of Art Design and Architecture, University of Johannesburg, 2008), 273-85.

¹³⁸ Lo, Edward W. M, "Urban Design Control in Hong Kong, " *Planning & Development* Vol 8, No. 2 (1992): 23-27.

lease conditions especially directed to design control include restrictions on the height of development, types of dwellings, landscaping works, and the “Design, Disposition and Height” clause (DDH clause). Thus, the Lands Authority is empowered to reject building plans submitted by the developers which are considered not to satisfy the urban design standard. Second, the other major statutory device is the Building Regulations and Section 16(1) of the Building Ordinance. Although this set of regulations is not prepared for urban design control at the city level, it still functions to ensure the coherence of design in the context of the adjacent built environment or its prevailing building form. Third, the aforementioned Town Planning Board was constituted to be in charge of the preparation of statutory zoning plans and the approval of developments in accordance with these plans. In some Special Design Areas (SDA), the statutory plan must include a detailed layout plan to ensure that special design objectives can be met, such as the dedication of land or spaces for public circulation.

Apart from the statutory regulation, so called “administrative” control is practiced through advice on urban design aspects in the lease conditions of the site and numerous urban design studies. The Hong Kong Planning Department recommends that the urban design guidelines be incorporated into the Hong Kong Planning Standards and Guidelines (HKPSG). Because it is difficult to give a quantifiable or performance-based guideline for urban design, developers intend to see urban design guidelines as negative restrictions for developments, rather than as an agreement to safeguard both the public good and private interest. Thus, the underlying principle of urban design control is to explicitly articulate those control requirements at the early stage of the development.

Basically, the morphology of Hong Kong is a product of developers’ exploitation of allowed

development intensity with regard to prescribed programmatic demands. Such an abusive implementation of allowed floor spaces starkly contested all existing architectural principles which are unconsciously held by planners and architects in the West. In other words, the spatial wisdom of Hong Kong results from an adaptive interpretation of a set of universal design codes. It generates conditions in which programs and volumes can be intermingled, overlaid, and juxtaposed in ways which have never been considered ethical or proper in the Western context. This observation brings Hong Kong to a level of a new “Manhattanism” or a more brutal and authentic capitalism. In that sense, urban studies of Hong Kong must be made aware of such a new “Manhattanism” and the day-to-day regulatory system producing urban form of Hong Kong.

3. Vertical Integration across the Boundary: Luohu Checkpoint

What is concurrent with the inter-linked retail podiums built above major stations in the 1980s is the changing relationship between Hong Kong and Mainland China. Economic integration between the Pearl River Delta and Hong Kong occurred as early as the transition period (1984-1997). Hong Kong capitalists brought both investment and Hong Kong space to other South China cities. Thus, the built-environment across the Shenzhen River provides an alternative context to examine the dissemination of the Hong Kong model across the boundary between Hong Kong and Shenzhen. The border zone along Shenzhen River used to be a martially controlled buffer zone between Communist China and the outside world. However, ironically, it has become one of the busiest land ports in the world. From a regional perspective, the concentration of urban development around Luohu Checkpoint resulted from the enduring economic and political discontinuity across the border. Luohu Bridge was once the most important channel for Communist China to contact other parts of the world. Ever since 1978, the

year in which China reopened its doors to the world, the space of Luohu Checkpoint has been radically reshaped. The social and economic discontinuity between Mainland China and Hong Kong, and an asymmetrical, semi-permeable border control policy, offered great opportunities to Luohu Checkpoint by virtue of its proximity to Hong Kong (Figs. 18, 19).



Figure 18. Land ports on the Shenzhen-Hong Kong boundary, with Luohu Checkpoint highlighted.



Figure 19. The clustering of infrastructure in Luohu Checkpoint and its integration with architecture.

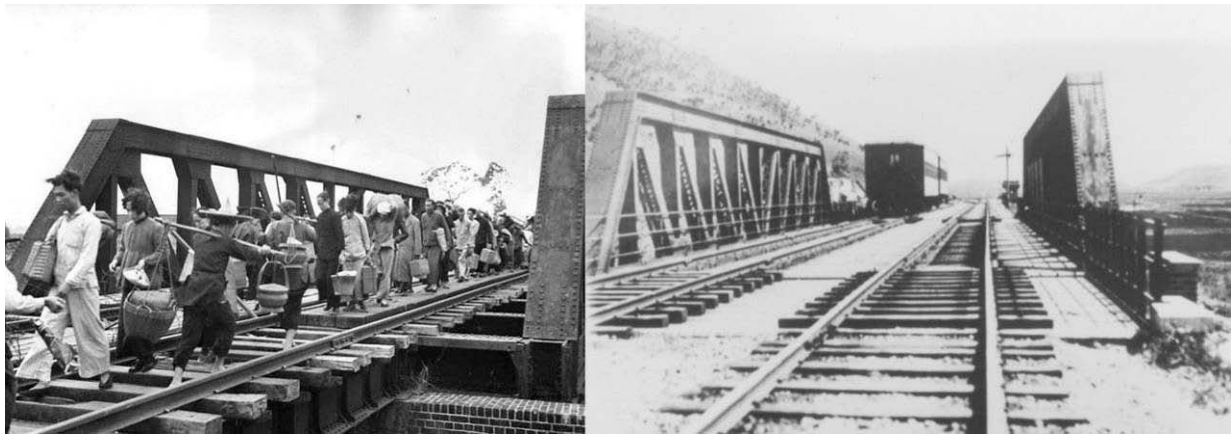


Figure 20.
 Left: Luohu Bridge in the mid-20th Century.
 Right: Luohu Bridge in the early 20th Century.

3.1. A Brief History of Border Cityscape across the Shenzhen River

In summary, for a long period of time in the 20th Century, Luohu Checkpoint was barely composed of a railway steel bridge and a cluster of shanties. No comprehensive master plan was implemented on this piece of land before 1980. Currently, Luohu Checkpoint is the busiest land

passenger checkpoint in China. It witnesses 250,000 cross-border trips on a normal weekday (inputs and outputs in total).¹³⁹ Most travelers transfer to long-distance coaches, taxis, subway, or trains through an enormous pedestrian zone. Geographically, the Luohu Checkpoint area sits on a sharp peninsula along a bend of the Shenzhen River, bounded by expressways which are unfriendly to outside walkers. Due to this spatial setting, it can be considered as a self-contained urban enclave (officially referred to as a precinct of 37.5 hectare in the planning document), which is both independent from its host city Shenzhen and also separate from the rest of Luohu District (Fig. 20).

In 1907, a trestle bridge across the Shenzhen River was rebuilt as a steel bridge with the opening of the Kowloon-Canton Railway. Shenzhen then developed into a small market town, and people moved freely across the border until it was sealed by the Communist government in 1950. After the 1949 Chinese Communist Revolution, a checkpoint was established jointly by China and the Crown Colony government. The sealing of the Luohu Checkpoint after the Chinese Revolution in 1949 was coupled with an influx of cheap labor from Canton (Guangdong Province) and Shanghainese industrial entrepreneurs, which have since accounted for the rise of Hong Kong as one the four Asian “tigers.” In the Cold War era, Luohu Checkpoint was the only lifeline between Hong Kong and Mainland China. It was also a window for China to glimpse the Western culture. In the meantime, Hong Kong emerged as a prosperous haven for the starving Chinese Mainlanders in the 1950s and 60s. Up until the 1960s, Hong Kong was a developing

¹³⁹ Data from the Hong Kong Immigration Department, 2011.

economy in terms of its per capita income; however, by 1997, Hong Kong's per capita income, in real purchasing power, was roughly equal to that of Japan and 80% of that of the United States. From 1949 to 1979, Hong Kong, as a political and economic refuge, received approximately one million migrants (both legal and illegal) from Mainland China in a grand "Chinese Diaspora." Most of the mainland refugees and migrants entered the New Territories of Hong Kong through Luohu Bridge. In the 1981 Census, Hong Kong residents who considered Hong Kong to be their place of origin accounted for only 3%; 86% of Hong Kong citizens were from Guangdong Province.

After China launched its "Reform and Opening-up" process in 1978, marking the inception of a brand-new reform-era, Luohu District, later the city of Shenzhen, as well the entire Pearl River Delta (PRD), was designated to be an outpost and industrial backyard of Hong Kong. The Chinese government was taking a more and more passionate role in civilizing its coastal areas as long as its authority was not permitted to be challenged. Simultaneously, Hong Kong was then undergoing an economic restructuring towards its finance and service economy. Due to proximity, cultural familiarity, and the low cost of labor, the bulk of Hong Kong's manufacturing activities were transferred to Guangdong Province, especially Shenzhen. Massive construction around Luohu Checkpoint started as early as 1978. The 1984 Sino-British Joint Declaration turned on the valve for economic integration. In the 1990s, the new central business district was proposed to be located at Futian District, south of Lotus Hill. Shenzhen is now a spatially de-centralized metropolitan area featuring a highly developed freeway system, subways, and bullet trains connecting other parts of the Pearl Delta Triangle. With the foreseeable deeper integration of Shenzhen and Hong Kong in the near future, Luohu Checkpoint, along with other checkpoints and ports in Shenzhen, would indispensably embrace the next round of

transformations (upgrades in public transportation, transfers of city functions, and economic reorientation toward a knowledge based economy).

With the loosening of cross-border travelling control in 2003, the movement of people from Hong Kong to China remains basically unimpeded; however, movement from China to Hong Kong is still restricted. The sharp contrast in landscape between Shenzhen and Hong Kong conflicts with the fact that Shenzhen River was officially referred to as an internal “boundary” between two province-level territorial units, instead of a “border” between two nations.

Shenzhen has developed into a vibrant industrial city with a population that is larger than that of Hong Kong. Unlike the Shenzhen side, the Hong Kong side of the Shenzhen River remains generally rural. While one side of Shenzhen features skyscrapers and shopping malls, the paddy-fields and green mountains on the south side of Shenzhen River are secluded from modern civilization. Although the New Territories of Hong Kong underwent rapid urbanization as new satellite towns mushroomed in valleys, reclaimed lands and paddy-fields of the mountainous area, the border landscape across the Shenzhen River presents an attitude of ambivalence of Hong Kong residents towards the date of ultimate integration (officially announced to be 2047, 50 years after 1997). The opposite attitudes of Hong Kong and Shenzhen towards the principle of “one country, two systems” determine the strong asymmetrical development pattern across the Shenzhen River, as if the boundary is protecting the New Territories of Hong Kong from the penetration from the skyscrapers of Shenzhen.

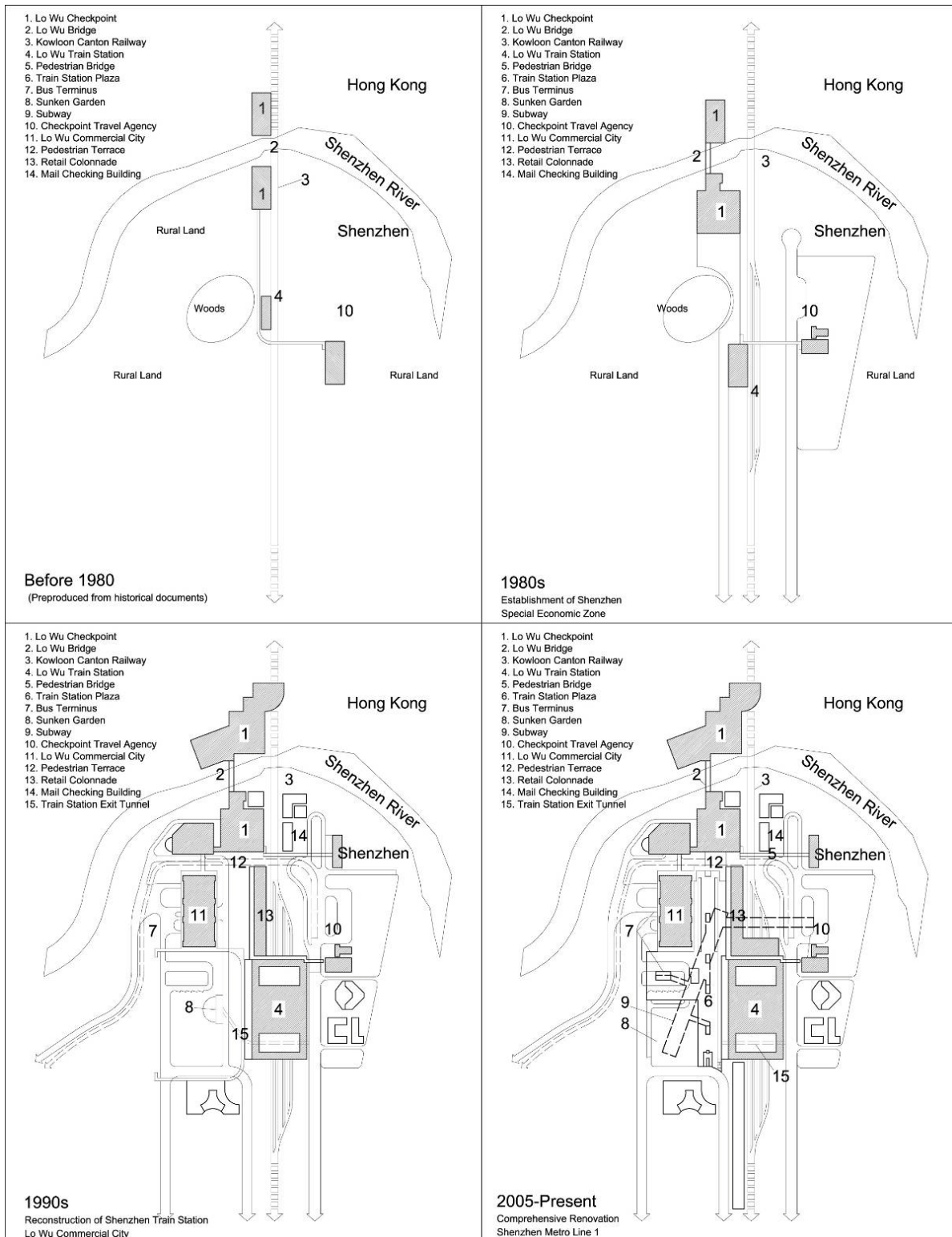


Figure 21. Three rounds of redevelopment of Luohu Checkpoint, 1978 to the present. Reproduced from Mr. Sun Huasheng's notes and sketches.

3.2. From the Bridge to the Entry City: Three Generations of Luohu Checkpoint

The Shenzhen Planning Bureau refers to the “Luohu Checkpoint and Train Station District” as a development area of 37.7 hectare on the Shenzhen side (Shenzhen City Planning Bureau, 1999), in addition to the Lowu metro station and control point on the Hong Kong side. The complex comprises the Luohu Railway Station, Luohu Commercial City (a retail and entertainment center), Luohu Subway Station, hotels, offices, restaurants, clinics, and customs facilities. Luohu Checkpoint (plus the train station and metro) has a daily passenger throughput of nearly 400,000, roughly one third of the urban population of Tijuana or San Diego. It should be noted that it is now only one of five border checkpoints on the Shenzhen-Hong Kong border. Compared to the other checkpoints, Luohu appears more welcoming to travelers, thanks to its efficient public transport system and relatively more affordable retailing and entertainment services.

With the introduction of the Automated Passenger Clearance System, or e-Channels, the current border crossing time for Lo Wu control point (Hong Kong) has been reduced to eight seconds, and a similar system has been installed on the Shenzhen side. Therefore, the official border (literally the median of Shenzhen River) for Hong Kong residents with smart ID cards is almost non-existent. The border as a physical form has dissipated. It unfolded into variegated one-way spaces for walkers with a wide range of purposes and identities, such as getting off or on the metro or bus, riding the conveying belt, ascending or descending the escalators, purchasing duty-free products, passing through the turnstiles, consuming cheaper massage services, etc.

However, Luohu Checkpoint has been deeply involved in illegal and informal economic networks: parallel trading, procuring (prostitution), pirated copy vending, drug trafficking, and scalping.¹⁴⁰ These activities, or narratives, enriched the space of Luohu Checkpoint. They coexist with the embarrassing (for the ruling class) economic discontinuity across the border, and their existence contests the state narrative of Luohu Checkpoint in the propaganda of national unity and modernization (Fig. 21).

Gateway to a Buffer Zone, 1978-1987

China's two-tier land tenure system loomed in the entire spatial history of Luohu. In 1987, Shenzhen enacted China's first land law for transferring land use rights. This regulation of the transfer of land use rights was designed after the Land Ordinance of the New Territories of Hong Kong. It is a transitional and controversial system in China's transformation from a "planned economy" to a "market economy." Similarly, as all land is officially state-owned in China, this land system ensures that indigenous villagers can collectively and permanently "own" their land and are not required to pay rent to the government for farming or residing, unless it was appropriated by the government for other purposes. The municipal government is enabled to

¹⁴⁰ "Parallel trading," or "parallel import," refers to the phenomenon of traders taking advantage of multiple entry visa policy to import goods from Hong Kong to Mainland China, causing shortage of household goods in the North District of Hong Kong. They buy goods tax-free from Hong Kong and sell them openly in Luohu Checkpoint at Shenzhen. Reportedly there are 20,000 active parallel traders according to a report from *South China Morning Post* in 2013, comprised of both Hong Kong citizens and Mainlanders. Traders have even turned public spaces around the Luohu Checkpoint and the subway station into a crowded open-air marketplace. Aside from parallel trading, procuring, pirated copy vending, and scalping are always conducted openly around Luohu Checkpoint.

requisition the land use rights from villagers and sell them to developers. Simply defined as the “Land Finance” of China, the transfer of land use rights (lease) in many cases sacrificed the interest of indigenous villagers. It empowered the state government to rapidly amalgamate available lands at a very low cost. Attracted by low prices, Hong Kong investors flocked into Shenzhen for purposes of speculative land development. However, there was a long absence of strong land use planning controls and comprehensive forward planning for the remaining villages. Thus, like the New Territories of Hong Kong, the metropolitan area of the Pearl River Delta is scattered among numerous densely-built villages within the cities. In this respect, the urbanization in China was both facilitated and hindered by the two-tier land tenure system. The early planning practices of Luohu Checkpoint were implemented in this ambiguous land regulation.

In 1980, Luohu was set out to be the commercial center of Shenzhen. However, the checkpoint area was seriously congested. Luohu Station’s capacity of 3,000 passengers per day had already become obsolete. In a letter to the Ren Zhongyi (one of China’s early reformers), Shenzhen’s vice mayor Shu Chengyou asserted his support for a proposal to comprehensively refurbish the shanties clustering around Luohu Checkpoint and Luohu Railway Station. This proposal included the flattening of the hilly district north of the checkpoint, a comprehensive plan for a plaza and modernized checkpoint facilities, and expansion of Luohu Railway Station and re-organization of its circulation pattern. Mr. Shu emphasized that the checkpoint was a gateway and a showcase of Shenzhen’s economic achievement, and the flattening of the hills around the checkpoint can provide abundant buildable land for customs facilities, border security facilities, and hotels.

After the 1984 Sino-British Joint Declaration, a new double-deck pedestrian bridge across the Luohu River was built in 1985 to replace the railway bridge; at the same time, a new checkpoint building was completed and put into use. The input and output travelers started to be vertically split, which greatly expedited the border-crossing process. Yet, due to the two-tier land tenure system in China, requisition of rural land could not be exercised by institutes or developers who were tempted to build on the surrounding land until the legislation of transferring land use rights was enacted in 1987. As a result, until 1987, the periphery of the checkpoint remained unpaved. Travelers, after crossing the customs area, had to walk on a muddy trail to the train station or bus station. Such a condition even embarrassed Chinese officials when dressed-up Hong Kong women wearing high heels were seen jumping on the muddy ground to avoid the water.¹⁴¹



¹⁴¹ Zhou, Changhe. "From Luohu to Futian: Transformation of the Center of Shenzhen." *Southern Metropolis Daily*, May 17, 2013. This experience was recounted by Mr. Jiang Zemin, the former Chinese President, then the vice chairman of the State Import-Export Regulatory Commission. The Chinese government is usually very sensitive to these "shames" and ensuing reactions would occur immediately if any high-ranking officials felt humiliated.

Figure 22. Luohu Commercial City and the crowds in the checkpoint zone, 1990s.

Malling of the Checkpoint: 1987-1997

In 1987, the government authorized the China Academy of Urban Planning and Design, a state-owned planning consultant, to draft a long-term plan for Luohu Checkpoint and Train Station. An area of 25 hectares was officially demarcated, which included the checkpoint, train station, and an existing hotel to the north. Emphasis was placed on the circulation system and its connection to the ambient streets. The completed long-term plan was presented to the Shenzhen government in 1988. A jury's review of the 1988 plan, endorsed by Shenzhen Construction Bureau, discussed the spatial solutions proposed by the plan. The 1988 plan suggested: (1) an expansion plan for the new railway station; (2) an elevated driveway and elevated pedestrian system set out to fulfill a volumetric border-crossing program; (3) an elevated accessing driveway leading vehicles to a parking structure for dropping off; (4) a double-deck interior bridge connecting the parking structure with the newly built checkpoint building; and (5) a conveying belt corridor connecting the exit hall of Luohu Railway Station and the eastside parking structure. A part of the outdoor bus terminus was proposed to move to the first story of the parking structure. In general, the 1988 plan emphasized a volumetric pedestrian system to separate the pedestrian flow from automobiles, and argued for unifying all of the buildings into an integrated complex. According to the review, the 1988 plan rejected the plan for a multi-story plaza, albeit suggesting a more vertical spatial organization for pedestrians in later schemes.

As the first master plan for Luohu Checkpoint, the 1988 plan laid out the fundamental spatial framework of Luohu Checkpoint and Luohu Railway Station. However, the plan did not separate

the automobiles from pedestrians on the plaza. The traffic disorder on the plaza seriously hindered the circulation performance and related businesses around the checkpoint area. The 1988 plan systemically restructured the circulation system of Luohu Checkpoint; however, the ground plaza was still majorly congested with a mix of cars, buses, and pedestrians. No pedestrian bridge was built on the plaza until 1997. Hence, in 1991, the new railway station was put into use.

By virtue of increasingly easier land requisition procedures, Luohu received more and more attention from Hong Kong investors in the 1980s. As Mr. Shu Chengyou anticipated in 1980, in the 1980s, Luohu Checkpoint and the entire Luohu District were widely considered as very attractive land for development. The land which later became Luohu Commercial City was purchased by a Hong Kong developer, Sir Gordon Wu. The structural foundation of Luohu Commercial City was once supposed to support a skyscraper funded by Wu. In 1992, the development rights were transferred to the Shenzhen Property Group. Currently, 98% of businesses in Luohu Commercial City are owned by Hong Kong investors. Although it was originally designed to be an auxiliary project of the checkpoint area, it turned out to be a shopping center. This shopping center, right next to the immigration checkpoint, was long considered to be a showcase of Shenzhen's retail market, targeting shoppers from Hong Kong who were in search of made-to-measure clothing, counterfeit handbags and watches, pirated DVDs, and restaurants of various cuisines. Luohu Commercial City added 46,450 m² of retail area to the checkpoint zone. Its ground floor deck was dedicated to a bus terminus, and its platform directly adjoined the second floor of the checkpoint building. Again due to the two-pier land tenure system, those villages whose collective land use rights were requisitioned by the municipal government had the privilege to rent these stores. From 1997 to 2000, it received

30,000 customers on an average weekday.¹⁴² Most customers were attracted by its proximity to the checkpoint and by its bazaar culture. Luohu Commercial City facilitated the transformation of Luohu Checkpoint from a transitional space to a destination. Apart from Luohu Commercial City, eventually more vendors, travel agencies, clinics, restaurants, and other businesses started to occupy all of the available spaces in the checkpoint building and the railway station (Figs. 22, 23).

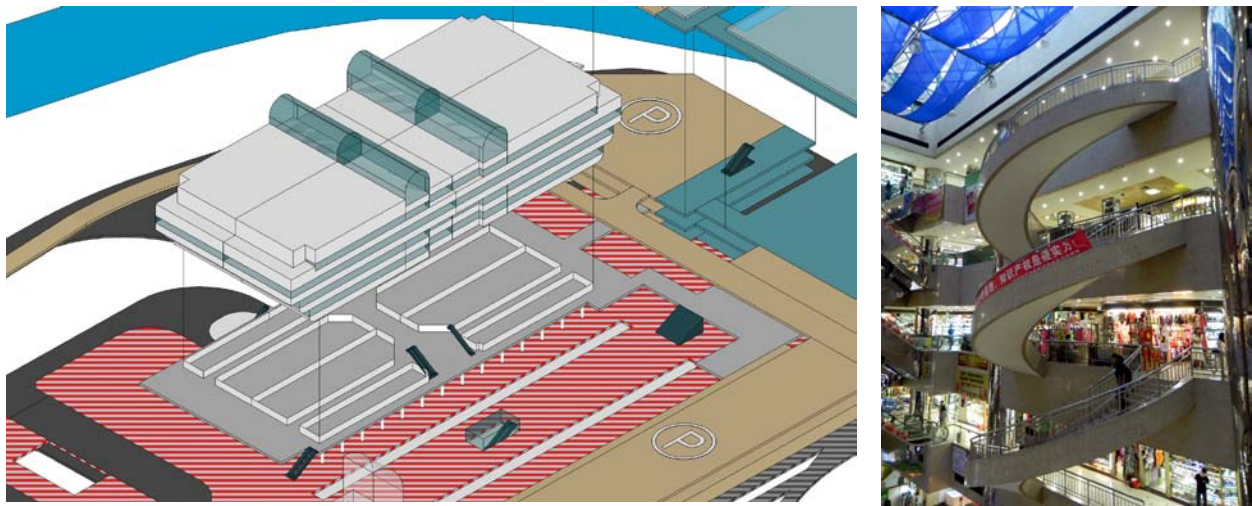


Figure 23.
Left: Author's diagram showing Luohu Commercial City.
Right: Interior of Luohu Commercial City.

¹⁴² Wenping Zhang, "A Talk on the Luohu Commercial City at Luohu Bridge." *Industrial Economic Review*, no. 8 (2000).



Figure 24. Left: Urban design guidelines in vertical zoning for Shenzhen's Futian Central Business District. Right: The first comprehensive city plan for Shenzhen, 1986, courtesy of the Planning Bureau of Shenzhen.

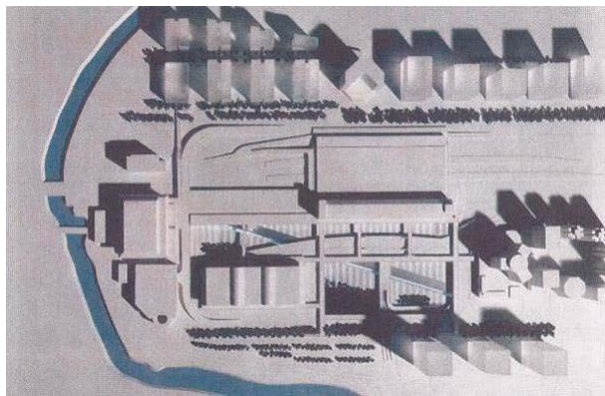


Figure 25. Conceptual plan for Luohu Checkpoint submitted by Nekkei, courtesy of the Shenzhen Planning Bureau.

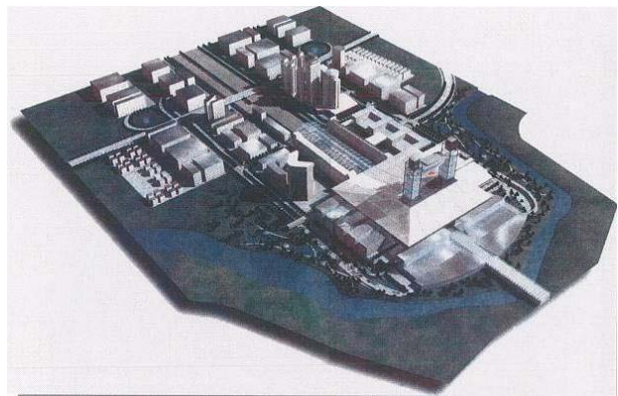


Figure 26. Conceptual plan for Luohu Checkpoint submitted by Obermeyer, courtesy of the Shenzhen Planning Bureau.

Plastic Surgery: 1997-present

In 1998, Shenzhen, as a Special Economic Zone, was the first Chinese city to formally establish a modern city planning system adopted from Hong Kong, now a special administrative region of China. The planning system stipulates that urban design guidelines must cater to areas of special public interest. In order to democratize the planning process, a jury comprising stakeholders and public sectors must be organized to supervise the planning process for special urban areas. Compared to other parts of China, the value of public space and urban design, as a western concept, has been widely acknowledged in Shenzhen in the new century.

The handover of Hong Kong to China drastically changed the Hong Kong-Shenzhen relationship in 1997. At that point, Luohu Checkpoint was considered to be an important chapter in the state narrative of this historical moment. The on-going integration brought more investment for land development. In 1998, a land auction market was established in Shenzhen. Land use rights for (re)development were available to be sold by the municipal government, and they became major sources of city revenue. With the maturity of the regulatory environment of Shenzhen, the municipal government made a decision to further refurbish Luohu Checkpoint as a reaction to ever-increasing cross-border travelers and train riders. In 1999, an invited planning competition was hosted by the Shenzhen Municipal Bureau of Urban Planning and Land Resources. Three international engineering and design firms (i.e., Parsons Brinckerhoff, Nikken Sekkei, and Obermeyer) were commissioned to produce a redevelopment plan for the checkpoint area. After a few examination meetings, the jury recommended the plans by Nikken Sekkei and Obermeyer

to the municipal government for further consideration.¹⁴³

After a second round of examination meetings, the Nikken Sekkei Plan was selected by the municipal government to produce an integrated plan by incorporating the “strong points” of the Obermeyer Plan and the Parsons Brinckerhoff Plan (Planning Bureau, 2000). However, the integrated plan turned out to be unsatisfying for the jury. Therefore, the China Academy of Urban Planning and Design was authorized again (after the 1988 plan) to produce another integrated plan based on the first Nikken Sekkei Plan. In 2003, after numerous jury meetings, a new Luohu Checkpoint was ultimately approved by the Shenzhen Planning Bureau and the municipal government. In this plan, the outdoor sunken plaza was interiorized to reduce energy consumption. A principle of “circulation channelization” was set out to guide future development. This “channelization” was widely adopted by planners and the government as not only a solution, but also a slogan for propaganda in the mass media. Although the approved plan

¹⁴³ The plan submitted by Obermeyer suggested a comprehensive redevelopment, including the checkpoint building, the east and west plaza, the train station, and the public transit system. The main feature of the Obermeyer Plan was a double-deck grand hall containing the functions of Luohu Railway Station, Checkpoint Building, and Luohu Commercial City. The proposed reconstruction called for a new Luohu Bridge. The plan also proposed to completely segregate pedestrian flows from automobiles. It was seen by the jury as a flexible, clearly articulated plan with a long-term vision. However, the plan might conflict with those approved developments and, hence, demands a higher budget, i.e., more than twice the budget of the Nikken Sekkei Plan.

The Nikken Sekkei Plan showed more respect for the existing built-environment of Luohu Checkpoint. The main feature of the plan was a multi-story open-air plaza (sunken plaza, ground plaza, and elevated terraces), catering to the enormous pedestrian flow travelling between the checkpoint and transit terminals. The jury considered it to be a fine-grained plan, due to its reasonable budget and respect for the existing spatial conditions; however, the plan’s weak point resulted from its frugality in budget. It failed to set out a radical upgrade for the spatial condition of the entire checkpoint zone, especially for the west plaza. In addition, the 4-hectare open-air sunken plaza would not be workable for the sub-tropical climate of Shenzhen.

was basically a mild redevelopment plan, with minimum spatial intervention, in the political environment of Shenzhen, the jury and the municipal government hoped to mobilize broader social forces so as to meet a tight development schedule. Hence, an animation demonstration introducing the planning concept of Luohu Checkpoint was made. The jury hoped that the animation would effectively dramatize the stark contrast of environmental conditions before and after the “channelization” and, hence, present the significance of the redevelopment plan to the general public.

At the same time, Hong Kong SAR was considering the redevelopment plan for its Lowu Control Point (Hong Kong side of the Luohu Checkpoint). The redevelopment plan included: (1) widening and interiorizing the Luohu Bridge; (2) adding a fourth platform for the Kowloon-Canton Railway (now a branch of the Mass Transit Railway Corporation of Hong Kong); and (3) expanding the immigration hall from 1,520 m² to 2,200 m². However, these piecemeal refurbishments could not significantly improve the circulation capacity of the control point. Hong Kong architect Ho Tao even proposed an expansion plan for the Luohu Checkpoint, which was very close to the Obermeyer Plan, in response to Shenzhen’s redevelopment of the checkpoint area. Shenzhen and Hong Kong could not reach an agreement on such an integrated plan because rebuilding the railway bridge (Kowloon-Canton Railway Bridge) and pedestrian bridge (Luohu Bridge) would require political power on the state level, which the two cities were unable to obtain.

Driven by an awareness of the value of architecture and design in civic spaces, the Shenzhen Government continued to bring in international knowledge for improving the environmental quality of Luohu Checkpoint. In December 2004, Shenzhen’s No. 1 subway opened, which runs

between Luohu and the Shenzhen Airport. A new side platform for passenger unloading only was added soon to alleviate congestion during peak hours. The redevelopment of Luohu Checkpoint broke ground in 2002 and was completed in 2006. Simultaneously, a landscape design firm, the SWA group, was commissioned to offer a plan for refurbishing the sunken garden, plaza, and concourse. This project turned out to be one of the five winners of the Urban Land Institute's (ULI) Awards for Excellence in the Asia Pacific region in 2005. ULI's jury panel's remark was "Luohu Land Port and Train Station, China's busiest gateway, was transformed into an efficient and user-friendly intermodal transportation hub and multi-level public space to serve the 400,000 people who pass through daily."¹⁴⁴ The criteria for the awards include leadership, contribution to the community, innovations, public-private partnership, environmental protection and enhancement, response to societal needs, and financial success. It is noteworthy that the award was given to the Shenzhen Municipal Planning Bureau, whereas usually such awards were given to design firms.

Luohu Checkpoint is reported by local public media as a modernized and clean "Transit Oriented Development" (TOD).¹⁴⁵ Luohu Checkpoint features two strategies of vertical separation: the crucifix-shaped multi-level concourse connecting various functions, and the multi-level loop road around the site. Reportedly, this "TOD" model has proven to be so successful that it will be adopted by the entire Luohu District. However, the operation and management of the multiple

¹⁴⁴ Shenzhen Government Online, 2006.

¹⁴⁵ Feng Jie, "Experiencing the Convenience and Efficiency of Tod." *Shenzhen Special Zone News*, Jan 27 2010.

functions of the checkpoint are not able to comply with the complexity of the space. Due to the mixed pattern of land utilization by multiple private and public sectors, there was once no unified patrol service in Luohu Checkpoint. The city police are not authorized to execute duties in the areas managed by customs or the border security department, and vice versa. However, because Luohu Checkpoint is seen as a “city lobby” and showcase to overseas travelers, any informal or “uncivilized” activities are embarrassing for local bureaucrats. Recent reports show that the first things that come to people’s minds when thinking of Luohu are nightclubs and counterfeit goods.¹⁴⁶ Hence, local mass media also carry stories about battles against the parallel trading, unlicensed taxis, hawking, counterfeit products, and drug traffic in Luohu Checkpoint. Thus, the redevelopment plan was also considered to be a social solution that would wipe out the informal business networks deeply rooted in the checkpoint.

The invited competition of Luohu Checkpoint (1999) was Shenzhen’s second attempt to reshape a public space with a global intellectual input (the first was Futian Central Business District, from the late 1980s). From then on, international competitions were increasingly popular in guiding the civic design of major civic projects in Shenzhen. Although the architecture of Luohu Checkpoint is philistine and mediocre, the endeavors in urban design and architecture attempt to make the checkpoint area into a self-contained commercial complex. The vertical separation of the pedestrians, the subway station, the bullet train station, bus terminals, and taxis creates

¹⁴⁶ Huifeng He. "Luohu Planners Consumed by a Risky Ambition." *South China Morning Post*, Saturday, 21 July, 2012 2012.

multiple border-crossing experiences for travelers with a variety of purposes and destinations (Figs. 24-29).

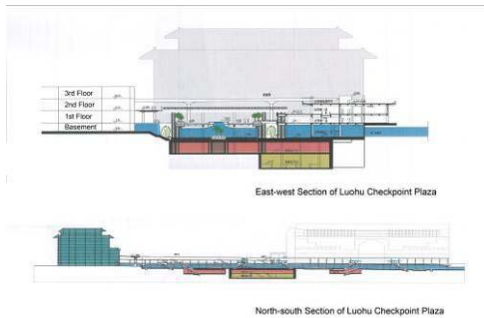


Figure 27. As-built sections provided by the China Academy of Urban Planning, courtesy of the Shenzhen Planning Bureau.

Figure 28. Artist's impression of the multilevel plaza of Luohu Checkpoint, courtesy of the Shenzhen Planning Bureau.

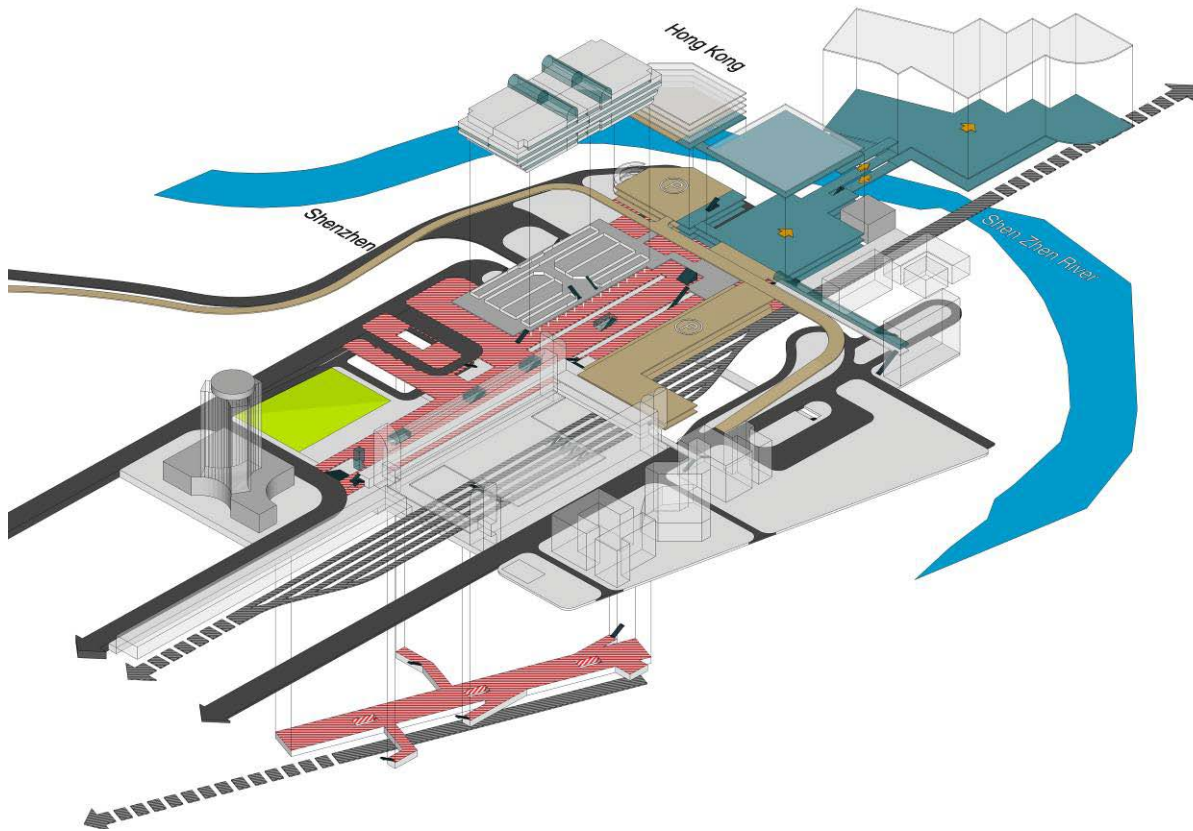


Figure 29. Author's diagram showing the vertical ordering of Luohu Checkpoint.

Very few existing spatial typologies can be employed to interpret the integrated space of Luohu Checkpoint. First, it is not only a terminal city, such as the Hong Kong Station (IFC) or Kowloon Station (Union Square), but also a highly-policed border zone. The built environment of Luohu Checkpoint is the outcome of piecemeal urban restructuring. Second, it is not a typical city center. The prosperity of Luohu Checkpoint is pre-determined by the economic and political climate across the border (e.g., currency exchange rates, tax rate, international politics, and immigration management) and the day-to-day operation of the checkpoint itself. It is prone to the subtle, dynamic political and economic balance amongst a variety of political forces. The evolution of Luohu Checkpoint from a border village to an intensively built “entry city” is both the outcome of the enduring political and economic friction between Hong Kong and Mainland, and the outcome of the growing demands for connectivity and accessibility within the metropolitan area of the Pearl River Delta as a whole.

The paradox in the place-making of Luohu Checkpoint urges urban scholars to understand the significance of the population density and activity intensity in both Hong Kong and Mainland China. Although, generally, Asia is a densely populated continent, the high urban density of Hong Kong and the Pearl River Delta is rather caused by imbalanced and asymmetrical distribution of infrastructure and resources across the entire country. Hence, urban functions, amenities, and resources within these urban nodes are always catering to a population far larger than it was expected to serve. Meanwhile, due to this country-wide inequality of economic development, any infrastructural betterment on a local scale (e.g., within the boundary of Hong Kong, within the Pearl River Delta) is not able to thin out the overpopulation and intensive

developments which cluster around major transportation hubs. In addition, although China is building one of the most advanced high-speed rail systems in the world, the high speed rail cannot decentralize the population from the top-tier cities of China, such as Beijing, Shanghai, and Guangzhou. On the contrary, it brings more in-migrants from the countryside to the city. Such an irreversible tendency coincides with the currently pervasive R+P developments all over China. Thus, the question of the Hong Kong Section should be further put in a broader context of China's spatial restructuring in terms of the internal relations between density and the cityscape of modernity.



Figure 30. A set of uphill escalators for public use mounted on the wall of a highrise apartment. Sai Wan, Hong Kong Island.
Source: *Ming Pao*. Retrieved <http://premium.mingpao.com>.

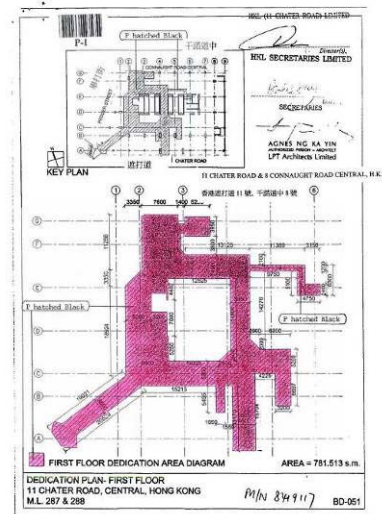


Figure 31. The pink space shows private floor area “dedicated” for public use. After 1980, such practices were turned into the POPS policy.
Source: Building Department of Hong Kong.

4. Consciousness of Hong Kong Space

This section discusses a developing consciousness in architecture, urban design, and public spaces as a byproduct of MacLehose's social reforms in the 1970s. The rising urbanistic consciousness resonates with a changing attitude to overcrowding and density. Prior to the MacLehose administration, especially in the 1950s and 1960s, the problem of density was a source of serious social crisis in terms of public health, housing, and traffic. R.C. Clarke, the assistant superintendent of the Crown Lands department, claimed that Hong Kong's high density population areas might become "socially intolerable and administratively dangerous."¹⁴⁷

Although postwar British planning provides a multitude of urban models, the visions borrowed from Modernist urbanism turned out to be too idealistic for Hong Kong. In the late MacLehose administration, planners and architects began to see the urban condition not as a problem to be fixed, but as an opportunity to speculate on a new order of urban forms. The 1970s and early 1980s produced many concepts and principles of urban identity which penetrated into the latest urban practices after 1997. The latest tendency is that as the spatial consciousness is transcribed into urban design guidelines and regulations, the city became less open to alternative options, especially those regarding a new form of density.

The MacLehose administration (1971-1982) is commonly considered by historians as marking the inception of a "benign colonial rule." It put Hong Kong on course to become a modernized

¹⁴⁷ R.C. Clarke, "Hong Kong's High Density Population Areas may become 'socially intolerable and administratively dangerous'," *The Hong Kong & Far East Builder*, Volume 18, No.6.

city state. Professionals and technocrats became a political force guiding the way of land development and plan-making in Hong Kong. At the same time, Hong Kong bore witness to the popularity of its magazines in the field of architecture and the construction industry. These trade magazines targeted an audience who constituted a knowledge class in architecture, engineering, and planning. Magazines, such as *Far East Architect and Builder* (1953-1980), *Asian Architect and Builder* (1972-2003), *Building Journal Hong Kong* (1973- present), and *Vision* (1983-1990) reflected a school of intellectual thought which gradually viewed architecture and urbanism as a practice detached from surveying and engineering.

In Europe and the United States, journalism of architecture and urbanism usually defined a body of knowledge which was in part the voice of the rising civil society. For instance, New York in the 20th Century boasted a long tradition of architectural journalism and intellectual leaders, such as Herbert Croly, Lewis Mumford and Ada Louise Huxtable, who incorporated architecture and urbanism into the everyday discussion of the general public of New York.¹⁴⁸ More or less inspired by the wave of a “magazine boom” in the 1960s and 70s (especially in the developed West), Hong Kong architectural journalism demonstrated a new profile. On the one hand, these magazines passionately introduced cutting-edge building technologies and concepts from a global perspective, rather than a colonial one. On the other hand, they commenced an introspective reflection upon the urban identity of the city itself. Such a progressive intellectual environment was impeded when Chinese land owners eventually took control of the real estate

¹⁴⁸ Thomas Bender, "Architecture and the Journalism of Ideas," *Design Book Review*, no. 15 (1988): 47-49.

market in the 1980s. In comparison with other historical archives, trade magazines are more time-sensitive. They honestly and vividly depicted architecture as both a discipline and as public perception at the time. English magazines eventually lost their popularity after 1997, when the majority of developers, architects, and planners preferred to use their own language in daily practice.

It is still controversial whether there ever was a clearly defined Hong Kong way of building. However, there has been a public discussion devoted to urbanism, environment, and a more self-conscious architectural culture ever since the end of the MacLehose administration. Eric Cumine's *Hong Kong Ways and Byways* (1981) is a snapshot of the cultural landscape of Hong Kong instead of a treatise anthology on Hong Kong architecture. Despite its focus on the broader material culture of Hong Kong, it comprises anthropological investigations into the urban condition of a pre-modern Hong Kong before it became a world city in the 1980s. It also functions as a guidebook, satisfying the curiosity of Westerners, who saw Hong Kong as an otherworldly colonial city.¹⁴⁹ This well-illustrated book vividly demonstrates how far contemporary Hong Kong distanced itself from its early postwar decades. Yet, how this post-war Hong Kong was incorporated into the Hong Kong that we perceive today is yet to be inspected. Behind the kaleidoscopic material culture was a rising consciousness of local urbanity in constant transition. One might find that urban discourse in the MacLehose Era was imbued with competing ideas: market vs. equity; environment vs. utility; place-making vs. mobility; and city

¹⁴⁹ Eric Cumine, *Hong Kong Ways and Byways* (Hong Kong: Belongers Publication, 1981).

vs. architecture. These ideas continue to be pertinent to the urban condition of Hong Kong in the new century. However, what has been lost is the strong aspiration for alternative options and mutations.

From the late 1960s to the early 1980s, professional magazines evolved into a discursive platform for critics and leading architects. Architects and critics, such as Eric Lye, Tao Ho, Ian Brown, Julia Fung, and David Lung became frequent contributors to these magazines. Unlike their Western rivals, such as Ada Louise Huxtable, these authors were not professional critics. They were architects, educators, or editors who voiced their concerns about the urbanism of Hong Kong in public literature. Except for the authors who taught or practiced in Hong Kong, many visitors were involved in this knowledge production, despite their views not being short of fragmental impressions or arbitrary assumptions. Such a tendency should, to a great extent, be attributed to both the Hong Kong government's increasingly hands-on role in infrastructural development, urban renewal, housing and the new town plan, and a developing public recognition of architecture and urbanism in the 1970s and 80s, as well. Discussions and critiques in these magazines cover a multitude of fields regarding town planning, public housing, urban environment, and spatial equity.

Few of these above mentioned magazines survived the changing professional culture in the 1990s. Thus, the ephemeral prosperity of professional magazines implies two facts. First, Hong Kong is experiencing a new round of globalization in the late 1990s and the new century. Practitioners are more likely to be exposed to a global design discourse in a multi-nationally collaborative career environment. They either turn to architectural magazines issued in Mainland China (e.g., *Time+Architecture*, *Architectural Journal*), with tremendous circulation, or turn to

magazines issued in Europe or North America. Second, it should be acknowledged that the maturity of Hong Kong's architectural discourse in the 1980s has an intimate relationship with 1960s British urbanism, albeit the latter was adapted to fit into an East Asian context. These thoughts and visions produced in Britain in the 1960s reappeared in a new form in Hong Kong after 10 or 20 years. This time lag between the West and East Asia can be observed through various aspects of planning history. Thus, many concepts and practices which have lost favor in first or second Machine Age might be popular in East Asia in a later era. For instance, building standardization, metropolitan urbanism, and comprehensive planning are currently widely accepted ideas in the architectural discourse of Hong Kong and Mainland China. The ideas of mobilities, spatial integration and rail-property joint development, which are considered obsolete and unviable ideas in the Western context, have been zealously absorbed into the urban practices in Hong Kong and later Mainland China for the past decades.

Table 1. Architectural magazines (English) firstly issued before 1980

List of Magazines	First Issue	Last Issue	Press	Used names
Far East Architect and Builder	1953	1980	Far East Trade Press (The press disbanded in 1992)	1953-1965 The Hong Kong and Far East Builder, 1965-1969 Far East Architect and Builder, 1969-1971 Far East Builder 1972-1980 Asian Building and Construction
Asian Architect and Builder	1972	2003	Thomson Press	1972-1982 (October) Asian Architect and Builder, 1982 (November)-2003 Asian Architect and Contractor
Building Journal	1973	present	China Trend Building Press	N/A
Vision: Architecture and Design	1983	1990	N/A(?)	N/A

Beginning in 1980, the concept of “urban studies” was introduced to Hong Kong’s intellectual circle. One crucial contributing factor was the establishment of the Centre of Urban Studies and Urban Planning within the University of Hong Kong. Hence, the planning practice of Hong Kong came under the scrutiny of left urban scholars. This new perspective of urbanism was, in large part, the brainchild of the urbanist Alexander Cuthbert, who taught in the University of Hong Kong and was one of the founders of the Centre of Urban Studies and Urban Planning in the 1980s. There was an attempt to explain the physicality of spatial configuration as products of social processes and political policies. Cuthbert regarded architecture, urban design, and planning as “functional interstices in an administrative complex required by and devolving from the existing social order.”¹⁵⁰ Thus, from the mid-1980s, the works of David Harvey, Doreen Massey, Allen J. Scott, Manuel Castells, Kenneth Frampton, Manfredo Tafuri, and Sharon Zukin started to exert a critical impact on the planning literature of Hong Kong, coalescing into a set of dispositions (or biases) attuned to a critical culture in the area of “urban studies.” Castells, Goh and Kwok’s study, *The Shek Kip Mei Syndrome*, on public housing policy in Hong Kong and Singapore applied the conception of “collective consumption” to the urban studies of Hong Kong. Thus, from the late 1980s onwards, leftist criticism of the space of Hong Kong was directed to the analysis of the state function, capital accumulation in space, and the attendant architectural commitment. Alongside this tendency, a new generation of urbanists, who

¹⁵⁰ Alexander R. Cuthbert, “The Landscape of Capital.” Conference paper submitted to the Symposium on Urban Design held by the Hong Kong Institute of Planners. Hong Kong: University of Hong Kong, Centre of Urban Studies and Urban Planning, 1985.

usually identify themselves as public intellectuals, is hardly interested in formal planning consultations, charades, or other normal channels of airing opinions. The social group has become an independently political force even though it has deviated from the traditional framework of comprehensive planning.

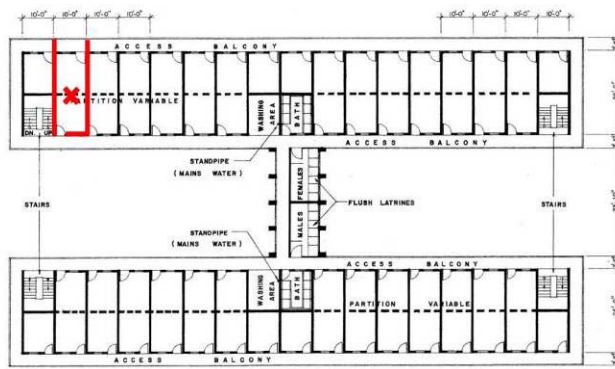
In hindsight, only a few scholars identified architecture as a positive participant in reinstalling the public realm in a “Culture of Congestion.” *The Making of Hong Kong: From Vertical to Volumetric* (2010) by Barry Shelton et al. and *Cities Without Ground: A Hong Kong Guidebook* (2013) by Jonathan Solomon et al. are two recent works which thoroughly discuss the architectural characteristics of the social spaces of Hong Kong with density as a keyword. Both of the two books seek to address the topographic characteristic of Hong Kong in relation to its way of producing the public realm. Laurent Gutierrez, the founder of the “Map Office” based in Hong Kong, was devoted to a project analyzing Hong Kong’s everyday space in a discursive context of mobility and cultural landscape.¹⁵¹ His study of the Central-Mid-Levels Escalator relates the lived urban space stitched together by the one-way space of the escalator to an experience of *flâneur* in Walter Benjamin’s *The Arcades Project*. Gutierrez remarks that the escalator is already a refuge of the vastness of the city, and it is a “vectorial image that travels from one segment to another, and from where the city appears and disappears according to its crossed layers.” Works of these researchers were driven by increasing attention to the

¹⁵¹ Laurent Gutierrez and Valérie Portefaix. “Liquid Journey, Central Mid-Levels Escalator.” (1999), <http://map-office.com/publication>.

environmental elements as a way to stage a world in transition. One notable phenomenon is that creative representation, mapping, and diagramming have become a predominant method of presenting a critique. These diagrammatic analyses convey an overarching impression of the spatial objects which otherwise cannot be imagined solely through textual depiction. However, these works run the risk of relegating complex spatial and social processes to the novelty-seeking of a spectacle. In fact, this fascination with novelty-seeking in visualization is still due to the insufficiency of relevant terminology (Figs. 17, 18).



Figure 32. Central--Mid-Levels escalators.



2 Units were converted into 1 Unit
 Access balconies on the outer side became private balconies
 TYPICAL FLOOR PLAN

Figure 33. The H plan resettlement estate in the 1950s. An instance showing the flexible building strategies allowing for future remodeling.

As formerly discussed, the common path of East Asian modernization can be generalized as “generic modernism.” The neologism is coined after what Rem Koolhaas termed the “Generic

City,” in *S, M, L, XL*.¹⁵² Koolhaas critiques the identity as a burden that chokes the city to death. To him, a generic city is a more emancipated urban form when the shackles of history and distinction are removed. The “generic” is a postmodern phenomenon, but its appearance in East Asia sprang from its postwar urban history. Thus, I tend to argue that the “generic,” or cultural nihilism, is rooted in the early experience of East Asian modernity. This pragmatic, discriminate, apolitical ideology is the hotbed profusely incubating new spatial configurations of the city.

In *Great Leap Forward*, Koolhaas blames the mainstream architectural discipline, in that “the entire discipline possesses no adequate terminology to discuss the most pertinent, most crucial phenomena within its domain.” The inadequacy of terminology in describing East Asian modernity results from two factors. First, there exists a cultural gap and a time lag between the established knowledge of architecture in a fashion of borrowed doctrines and the working theories applicable to the local Asian context. Second, as Peter G. Rowe and Seng Kuan argue, such a gap results from the detachment of the “form”(yong) from the “essence”(ti), or the detachment of modernism from the traditional Chinese quality.¹⁵³ An endeavor to secure a China-ness (essence or ti) in architecture became obsolete and quickly ran out of momentum in the late 1950s and 1960s after a period of tumultuous eclecticism, when economic exigencies and demographic pressures prevailed in the architectural discourse. Although attitudes towards modernization vary from place to place, greater China as a whole began to embrace a pragmatic

¹⁵² Rem Koolhaas, “The Generic City” in *S, M, L, XL* (The Monacelli Press, New York, 1994).

¹⁵³ Peter G. Rowe, and Seng Kuan. *Architectural Encounters with Essence and Form in Modern China* (Cambridge, MA: MIT Press, 2004). 2-23.

attitude in domestic buildings, commercial buildings, and any other “productive” buildings, or buildings purely functional.¹⁵⁴ This attitude produced an esthetics of forms stripped of architectural expressions, ornaments, or even formalism. The architectural implication of the divorcement of “form” from “essence” is that the postwar modernist city models and global fashions were more indiscriminately achieved in East Asia than in the West, because these models were considered merely “form” adapted to local circumstances. Conversely, in spite of their functions, the ideological or cultural reference attached to this model (“form”) does not disturb the local perception only if they facilitated cost and labor savings. This divorcement not only took place in architecture, but also in the overall built environment, including infrastructure and landscape.

Rooted in Asian modernity is the disparity between a modern appearance as a utilitarian facade and primitive capitalist doctrines. What sets East Asian modernity apart from the modernity of the West is that East Asian modernization sees the West as a model to emulate. However, when Paris and New York underwent their modernization, there was no such model in reality. Thus, the modernization of East Asia was replete with fragments from a modernistic impression of the West and, conversely, these fragments were attached to a body which did not fit in with the established modern impression. This disparity also relates to a mentality that regards everything as a matter of expediency. When Hong Kong sprang up from the dust of war and social turbulence in the 1950s and 1960s, quality of life and environment made way for the will to

¹⁵⁴ Ibid.,87-137.

survive. As a result, overcrowding and relatively substandard living conditions (which may be considered to be luxury in Hong Kong) were more likely to be accepted as necessary costs for survival. In that sense, all ready-made technologies and environmental elements can be put together as long as the composition satisfies the functional requirements. Hence, built environments of East Asia are often composed of inharmonious compositions, rugged city profiles, and expedient gestures.

This expediency and inharmoniousness in the built environment determine a set of undertakings in architectural practices in Hong Kong. By and large, urbanization in postwar Hong Kong was achieved without a consistent plan before the first *Colony Outline Plan* was prepared in 1969. This does not mean that architects did not engage in the production of the majority of the built environment. However, in many cases, architects knowingly created an expandable structural base to which auto-construction could be added. For instance, in the “H Plan” model of the first generation resettlement estates, the outer corridors and the two back-to-back units were knowingly designed to be convertible. The two units could be converted to one single double-sized unit. Meanwhile, the outer corridor could thus be converted to private balconies. In addition, programs and structures were layered and organized in a manner which is only adapted to the specific functional contingencies, without respecting any orthodox architectural or urban design rules. Generic building elements and standard unit plans were widely adopted in favor of construction speed and cost-saving. This indicates that sensitivity to proportion, integrity of form, and aesthetics of architectural expression have been very much removed from the building culture in Hong Kong.

A generic way of architectural practice and its presence resulted in a different manifestation of

congestion and density than that of New York or Paris. The mixed-use development in Hong Kong allows for the intermeshing, overlaying, and juxtaposition of functions and volumes which might be considered unrelated in the Western context. In order to maximize floor space and market interest, both developers and the government prefer maximum integration of a variety of urban functions on different levels. For instance, multi-level “marketplace” or municipal service buildings are typical everyday social spaces for low-income citizens. The “marketplace” is a high-rise interior city reminiscent of Koolhaas’s description of the Downtown Athletic Club. The shell-plus-service structure accommodates the farmer’s market, food court, sports arenas, libraries, and day care service at different levels of a single building. In addition, fully-integrated housing estates (market rate, subsidized public housing, and public housing for lease) were built across the three territories of Hong Kong from the 1960s. These estates are mini-cities, linked by a network of elevated covered walkways to provide easy access to and from the domestic blocks, and other communal facilities and amenities. The integrated pedestrian space gave a special sense of unity and identity to the entire environment. Meanwhile, many campus complexes were built along the same lines, such as the City University of Hong Kong (Chung Wah-nan and Alan Fitch Architects, 1983) and the Hong Kong Polytechnic University (Palmer and Turner, 1976). These campuses were designed as megastructures conveniently connected with the public transit. The last example is the Hong Kong Central--Mid-Levels escalators. Such a system stratifies the slow pedestrian, fast pedestrian, and car traffic in a three-dimensional pattern. To summarize, these sites present an art of sharing and serve as the semi-public realm for space users who are unified by a common contractual relationship with the space: working, retailing, dining, or commuting.

The evolution of the vertical configurations of Hong Kong reveals the micro politics of Hong

Kong. As previously mentioned, there have emerged two inter-connected urban phenomena: the vertical integration between the metro stations and the business complex and the interiorization of civic spaces. The geographic and demographic conditions of Hong Kong tightened the internal paradox between the primitive capitalist ideologies and modernistic fragments borrowed from the West. Architecture in Hong Kong is driven by the exploitation of programmatic demands and floor areas prescribed by planning standards and building codes, rather than traditional architectural doctrines concerning proportions and styles. The planners and architects of Hong Kong inexhaustibly look for new forms of space-sharing as long as the form facilitates market interests. The increasingly complicated podium structure of Hong Kong is a derivative of this super functionalism when it confronts extreme quantitative requirements

Chapter 4. Hong Kong Section in Public Space:

Multi-level Pedestrian Network in Hong Kong

1. Introduction to the Pedestrian Network in Hong Kong

The continuous pedestrian links are pretty successful and proclaim themselves a positive element of the Hong Kong way of building...these walkways point up the importance of the 'street' in the local environment... by contrast the mass of buildings which form the backdrop or 'sky' are solid and unmoving.

-M. Dean Sherwin¹⁵⁵

For architect M. Dean Sherwin, the metaphor "the street against the sky" reflects the juxtaposition of the "small and complicated against the large and monotonous," as his impression of Hong Kong. Sherwin sees the multilevel walkways as the "streets" in Hong Kong and as stages incubating "small incidents" as opposed to the enormous towers and volumes as the

¹⁵⁵ M. Dean Sherwin was deeply influenced by Archigram for its idea of megastructures and circulation, when he was a student in Bristol in the 1960s. He was the editor of a four-issue magazine *Megascope* (1964-1966) together with Peter Murray. This article was written when he was working for the Public Works Department of Malaysia. See M. Dean Sherwin, "The Street against the Sky," *Asian Architect and Builder*, July 1981, 16-27. Sherwin writes: "here in Hong Kong, pedestrian movement is a vital part of the local character, and it is heartening to see that of recent years much has been done in the way of separate pedestrian decks, especially in the Central area...in a dense business area where one is constantly taking the lift down to the ground only to take it up again in an adjacent tower, there is surely a case for many bridges at various levels...in the street used by people walking, whether it is on the ground or many meters up, things are at human scale and the grain is obviously small. There is all kind of small-scale incident, with shops and their variegated fronts, signs and advertising, individual decoration and ad-hoc design, places to sit and eat or just rest, merchandise, street-furniture, and all the paraphernalia of making a living."

backdrop of Hong Kong.¹⁵⁶ The metaphor also reveals an entrenched paradox for the place-making of Hong Kong, between the needs for agreeable environment and stringent quantitative requirements, including lack of flat space, insatiable pursuit for profit in every situation, eventually rigorous building codes. Planners and architects are constantly driven by an urge to innovatively and precisely meet these quantitative conditions without compromising the fundamental needs for a mass. Sherwin's impression of Hong Kong represents the arising local urban identity of Hong Kong in the 1980s, especially its unique arrangement in grade separation and sectional coordination. This local identity coincided with a new tendency that Hong Kong was no longer seen as a colony, but a *de facto* modernized city-state which had its own exercise of urbanism. The planning documents, from *Abercrombie Report* (1948) to the *Central Area Redevelopment* (1961), indicate the intimate relationship between the postwar British town planning and the Hong Kong's planners prior to the MacLehose Era. Over 20 years from the release of Central Area redevelopment, even for Sherwin, who was involved in the progressive movement in the 1960s and familiar with Archigram's ideas of megastructure and circulation, still considered Hong Kong a distinctive and hardly describable model for its architectural environment. Thus, the pedestrian network also offers a historical perspective to examine the evolving sectional ordering in Hong Kong and how it differentiates itself from those comparable systems of other metropolises in the West (e.g., Minneapolis, Calgary, Barbican at London).

The pedestrian system is a significant instance of Hong Kong's evolving form of sidewalks and

¹⁵⁶ Ibid.

streets. It constitutes the most important layer amidst Hong Kong's vertical ordering of its city functions. In many cases, the system pervasively penetrates into and links separate building podiums into a whole. It converges at the hall level of an MTR station (the mezzanine between the railway platform and the street level) or the atrium of the station's air-right developments (usually a grand shopping center) and reaches out to connect to a broader range of city functions including residences, shops, schools, municipal services, and recreation at various levels. It stitches up an experience of Fourier's "continuous arcades," extending the retailing experience into the metro station. Its emergence in the 1970s and 80s is the outcome of a couple of geographical, historical, and social determinants. Over a few decades from its inception in the 1960s, the knowledge about building and administrating the multi-level pedestrian network was transcribed into the planning standards of Hong Kong. Chapter 8 of *The Hong Kong Planning Standards and Guidelines* (2011) stipulates that a comprehensive and integrated approach in pedestrian planning should be adopted throughout the development process and the city should provide three-dimensional, grade-separated walking environment, covering a wide catchment area around major transportation interchanges.¹⁵⁷ Simultaneously, however, the system is often blamed by urbanists for its damage to a good urban environment.¹⁵⁸ Alexander Cuthbert blasted

¹⁵⁷ Pedestrian facilities include integrated pedestrian network, pedestrian priority area, pedestrian precinct or mall/centre, pedestrianized street, traffic calming street, elevated or underground walkway system, mechanized facilities, such as escalator and traveller, at grade signalized crossing, footpath, promenade, etc.

¹⁵⁸ Hong Kong's elevated pedestrian network in Central and Wan Chai has long been seen as a site suffering political tension. The presence of Philippine domestic workers gathering and resting on the walkways on Sundays has always been interpreted as a rising public consciousness challenging the elite land owners in Central. The discourse of Hong Kong's "disappearing public space" is established by scholars such as Ackbar

this system for creating immersive and inescapable consumer space and choking the traditional street. Hence, the three-dimensional pedestrian network becomes a test ground for examining the interaction between the physical approaches in planning and its social and economical impact. The following part of this chapter discusses why this critique is incomplete and what is missing in Alexander Cuthbert's argument.

In retrospect, the concept of a grade-separated pedestrian network was initiated in an age of rapid population growth. It is also a product of ever-deepening entanglement between consumerism and interchanges of mass transport (including metro, high speed railway, ferries, buses, and coaches) in a congested urban fabric. From 1945 to 1965, the population of Hong Kong roughly tripled. In reaction to a hazardously congested street space, grade-separated pedestrian networks were proposed to provide multi-level access to businesses, and channelize the growing pedestrian flow in Central (later in other commercial centers). Such approaches eventually evolved into planning regulations and government leases with the introduction of "privately owned public space" (POPS) in the 1980s. With the implementation of the new town plan in the New Territories, the pedestrian system was at the same time enabled to extend to the satellite

Abbas, *Hong Kong: Culture and the Politics of Disappearance* (Hong Kong: Hong Kong University Press, 1997); Alexander Cuthbert and Keith McKinnell, "Ambiguous Space, Ambiguous Rights: Corporate Power and Social Control in Hong Kong," *Cities*, Vol. 14 No. 5 (1997): pp. 295-311; Lisa Law, "Defying Disappearance: Cosmopolitan Public Spaces in Hong Kong," *Urban Studies*, Vol.39 No.9 (2002): 1625-1645. Each text sees the networked pedestrian walkways in Central as a frontier of fighting the pervasive global capital in its material form. Lisa Law's article contested the "outdated conception of a homogeneous civil society struggling against the state," and profiles these spaces as a site of cultural expressions in a transnational political context. This chapter is motivated by the incentive to recontextualize Hong Kong's spatial production history in a global urban discourse in the 1960s and 1970s when mobility (both vehicle and pedestrian) is a pressing concern.

towns with the New Town Development Program. As a type of urban infrastructure for the city, the elevated pedestrian network is facilitated by the government's active intervention in public infrastructure and spatial equity.

The authoritative role of the Hong Kong Government (compared with western economies, despite experiencing democratization to some extent recently) in conjunction with emerging private sector power determines its passionate attitude in the spatial re-organization of Hong Kong as a city machine, particularly in the provision of infrastructure, welfare amenities, and housing. In the meantime, pedestrian network should be considered an integral part of the government's provision of public spaces, such as the skywalks, tunnels, street setbacks and open roof terraces, for optimizing the entire pedestrian friendliness of the city. In a *de facto* city-state founded on a system of common law, government intervention in integrated and fine-grained urban design control has limited statutory or enforceable mechanisms.¹⁵⁹ The exercise of urban design relies on developmental layout plans or developers' discretion. Apparently, the government lease conditions or other piecemeal quantitative control do not suffice to meet people's qualitative needs, including the esthetic experience of the space. Instead, a cluster of large land developers, by developing multiple street blocks in a single plan, could determine the circulation pattern of major urban centers (i.e., the semi-state MTR, Hong Kong Land, Sun Hung Kai, Cheung Kong Group).

¹⁵⁹ Edward W. M. Lo, "Urban Design Control in Hong Kong," *Planning & Development* Vol. 8, No.2 (1992), 23-27.

In most cases, various segments of the multi-level pedestrian network belong to four types of social sectors: businesses, residential estates, the city (Road Department), and the MTR. This chapter majorly discusses these segments which cater to the retail and commercial functions instead of those within a pure residential environment or without a retail feature. The ensuing part of this chapter is composed of four sections. The first section outlines the context and terminology about the multilevel pedestrian zones in the planning history of Hong Kong. The second section examines the evolution of elevated pedestrian precincts in Hong Kong with reference to the arising consumer space and the regulatory environment of Hong Kong. The third section discusses two selected case studies (Central and Sha Tin) with a focus on the private-public cooperation with (Sha Tin) or without (Central) a set of stringent overall urban design criteria. The closing section of this chapter aims to be open-ended and reflective. It reflects on the pedestrian space in the context of a broader discourse on spatial sociology and offers an alternative perspective for assessing the role of multi-level pedestrian networks in shaping the sectional configuration of Hong Kong.

2. Grade Separated Pedestrian System: Context and Discourse

Modernist urban planning's inexhaustible pursuit for accessibility and pedestrian mobility has led to a three-dimensional solution for the densely populated modern city. For instance, the cover of *Scientific American* on July 26, 1913 presents a city of "elevated sidewalks," a dense cluster of skyscrapers connected by bridges at various heights. Similar fascination with the multi-level city can be seen in Moses King's "King's Dream of New York" (1908), in Harvey Wiley Corbett's "Proposal for Relieving Traffic Congestion in New York by Separating Pedestrians and Vehicular Traffic" (1923), and in Smithsons' Golden Lane Housing project with a "street in

the air” (1952) (as discussed in Chapter 2). In those utopian visions, the sidewalk system, detached from city streets, morphed into multilevel arcades or street valleys. In reality, such a multi-level pedestrian network was usually a by-product of large developments by single owners, such as New York’s Grand Central Terminal (1913) and the underground concourse of Rockefeller Center (1939), which are considered by Grahame Shane as “super-efficient enclave and hub” and “multi-layered microcosm of the larger City Machine of mass consumption and production.”¹⁶⁰

Such spatial approaches became popularized in post-war Britain and North America. Minneapolis downtown, Calgary downtown and Barbican at London all built overhead walking systems for their urban cores. From the late 1960s, new approaches in town planning to increase mobility were gradually introduced to the builders and planners of Hong Kong by trade magazines, such as *Far East Architect and Builder*, *Asian Architect and Builder*, and *Building Journal (Hong Kong)*. In 1960s and 1970s, Singapore, Malaysia and Hong Kong as a unified Southeast Asian region under British influence, was considered by the planners and architects to be experiencing similar growth and population pressures. Dual purpose pedestrian-shopping bridges in Singapore were built at about the same time.¹⁶¹ In Hong Kong, the first private pedestrian bridge was built by Hong Kong Land to connect the Prince Building and Mandarin

¹⁶⁰ Grahame Shane, “The Machine in the City,” in *The Urban Life World: Formation, Perception, Representation*, edited by Peter Madsen and Richard Plunz (London and New York: Routledge, 2002), 218-236.

¹⁶¹ See “Pedestrian Cum Shopping Bridge over Shenton Way,” *Asian Building and Construction*, June 1973, 15.

Hotel. The first public-private coordinated pedestrian bridge, connecting Blake Pier and Union House, and as an integral component of Connaught Center (now Jardine House), was built in the early 1970s. Within a short time, this bridge was extended into a network at a cost of ten million HKD and was intended to absorb half of the traffic flow of the pedestrians emerging from the Star Ferry Pier.¹⁶²

In the newly industrialized Hong Kong under the Murray MacLehose administration, urban gentrification has been employed as a successful way to cultivate a civilized society in barely a few decades (basically from the 1960s to 1980s). Similar to what Paris arcades did to the 19th Century French bourgeoisie, the weather-proofed elevated pedestrian network offered a decent semi-interior environment for a population who was learning to behave in a modern way. Coupled with the emerging civil society was that both new community centers and existing commercial nodes were more and more converted into a self-contained precinct in favor of frictionless internal circulation. With an increasingly hands-on attitude towards social welfare, the Hong Kong Government subsidized housing, health, education, and transportation, which were “crucial elements in ensuring a proper production and reproduction of labor.” Industrial production, capital accumulation, and collective consumption were inextricably related in a series of positive linkages.¹⁶³ Like other public goods, such as housing and mass transit, the

¹⁶² See “Mile-long Pedestrian Bridges for Central District,” *Asian Building and Construction*, June 1973, 10-14. The first public-private coordinated pedestrian bridge was planned because Connaught Center is located on a plot of reclaimed land which was not interwoven with the “traditionally developed” areas further inland.

¹⁶³ Manuel Castells & YinWang, Kwok, *The Shek Kip Mei Syndrome: Economic Development and Public*

pedestrian system (including skywalks and indoor public spaces) were jointly built by a multitude of public and private institutes, but guided by the government as a mediator. The pedestrian system worked as a type of “subsidy” for the space users of stakeholders and facilities by greatly reducing the cost and time involved in walking (the average current commute in Hong Kong is only 30 minutes door-to-door).

The elevated pedestrian network of Hong Kong crystallized the social coordination of a multitude of private and public sectors in a sectional view, each pursuing its maximum interest.

Development of the multi-level pedestrian network coincided with the maturity of MTR’s “Rail-Property” program, which was initiated in the late 1970s. It also entails multiple arrangements of property holdings, programs, and spatial components.¹⁶⁴ Amongst these measures, the “Rail-Property” program is the remarkable determinant which facilitates the intensive land use around train stations and, as a result, an integrated pedestrian environment.

The Mass Transit Railway Corporation (MTR) is a large player in creating mixed-use, pedestrian friendly development located within walking distance of or above transit stations.¹⁶⁵ In order to support the mass transport as the backbone of Hong Kong’s urban development, the Hong Kong Government gives the MTR various items of support, including granting to MTR the property

Housing in Hong Kong and Singapore (London, Pion Limited), 4.

¹⁶⁴ See Steven Lau R. Giridharan and S. Ganesan, “High-density, High-rise and Multiple and Intensive Land Use in Hong Kong: A Future City From for the New Millennium,” in *Future Forms and Design for Sustainable Cities*, eds. Mike Jenks and Nicola Dempsey (Oxford: Architectural Press, 2005).

¹⁶⁵ See Robert Cervero and Jin Murakami, “Rail and property development in Hong Kong: experiences and extensions,” *Urban Studies*, Vol 46 No. 10 (2009), 2019-2043.

development rights on top of the stations along the railway. This land grant can finance the corresponding railways under the “Rail-Property” model. With this model, the railway development guides the growth of local communities along the rail lines. Currently, the MTR owns 38 shopping centers in Hong Kong (another 13 are under construction or being planned). Amongst them, for instance, Hong Kong Station, Kowloon Station, and Tung Chung are situated in enormous vertically ordered developments. Additionally, the MTR also owns over 700,000 m² of leasable floor space in Mainland China. Many cities in China have launched projects with “Rail-Property” programs.¹⁶⁶ With the introduction of the “Rail-Property” programs, the MTR-owned developments are enabled to achieve a seamless transition from the MTR mezzanine to the shopping arcades above or adjacent to the metro station. Even though the transit stations, open spaces, shopping malls, parking structures and streets are all independently operated urban systems, they still have to connect to and comply with each other at different levels by different means. The integration of environmental objects usually involves diverse stakeholders and takes different forms of property holdings. Such cooperation might or might not be guided by an overall master plan, but it is usually driven by the common interest. The operative mechanism sustaining such a socially engineered environment ought to be further investigated (Fig. 1).

The government’s ambiguous attitude in providing public spaces is coupled with the

¹⁶⁶ Recently the Mainland government is considering uplifting the “Rail-Property” model to a level of national policy.

encroachment on the public spaces by large land owners on public spaces. Cuthbert and McKinnell presented three forms of the “erosion of the public domain” in Hong Kong: (1) public realm incorporated into the footprint of large building complexes; (2) pedestrian movement channeled through corporate spaces; and (3) civic spaces replaced by large shopping atriums.¹⁶⁷ In *Cities Without Ground: A Hong Kong Guidebook*, architect Jonathan Solomon further explores networked public space comprised of local and incidental urban interventions, echoing Cuthbert’s perspective on the loss of public space. Specifically, he argues for a combination of top-down planning and bottom-up solutions which can convert whatever land is available into public use.¹⁶⁸ This judgment resonates with urban critic Trevor Boddy’s criticism about the overhead and underground pedestrian networks that emerged in North American cities in the 1980s.¹⁶⁹

¹⁶⁷ Cuthbert and McKinnell, “Ambiguous Space, Ambiguous Rights,” 296.

¹⁶⁸ See Jonathan Solomon, Clara Wong, & Adam Frampton, *Cities Without Ground: A Hong Kong Guidebook* (New York: ORO Editions, 2012).

¹⁶⁹ See Trevor Boddy, “Underground and Overhead: Building the Analogous City,” in *Variations on a Theme Park: The New American City and the End of Public Space*, ed. Michael Sorkin (New York: The Noonday Press, 1992), 124-153.

quality as a complicated human experience and cultural phenomenon. The governmental lease is a critical determinant which engaged government in land appreciation. Under the governmental lease (usually with a 75-year term), each land development aims to achieve maximum business revenue and land appreciation. Moreover, as almost all land of Hong Kong is state-owned (Crown, and later, the Special Administrative Region, or SAR), all private developments taking place on state-owned land should be subject to the terms of governmental leases. The governmental lease stipulated that in the case of comprehensive large-scale private development, a master layout plan be prepared and submitted for approval to the satisfaction of the Director of Lands.¹⁷⁰ For those sites of special civic interest, the podiums, shopping arcades, and footbridges are all subject to a detailed master layout plan as standards for guidance. In many cases, master layout plans were employed to secure maximum accessibility to the businesses. The vertical ordering of metro lines, streets, and grade-separated pedestrian networks can double or triple the visibility and accessibility of these businesses with multi-level entry points. In this circumstance, planning consultants' role is inarguably not neutral in such an administrative framework, because they laid out the framework for guiding the built spatial pattern. In some cases, bonus floor areas were granted by the government as incentives for private developers to build spaces that are accessible to the public. In fact, it is the moderation between physical planning and economic incentives that created an ambiguous domain between the public good and the market interest (Fig. 2).

¹⁷⁰ Hong Kong Town Planning Division, *Town Planning in Hong Kong* (Hong Kong: Hong Kong: Town Planning Division, 1984), 24.

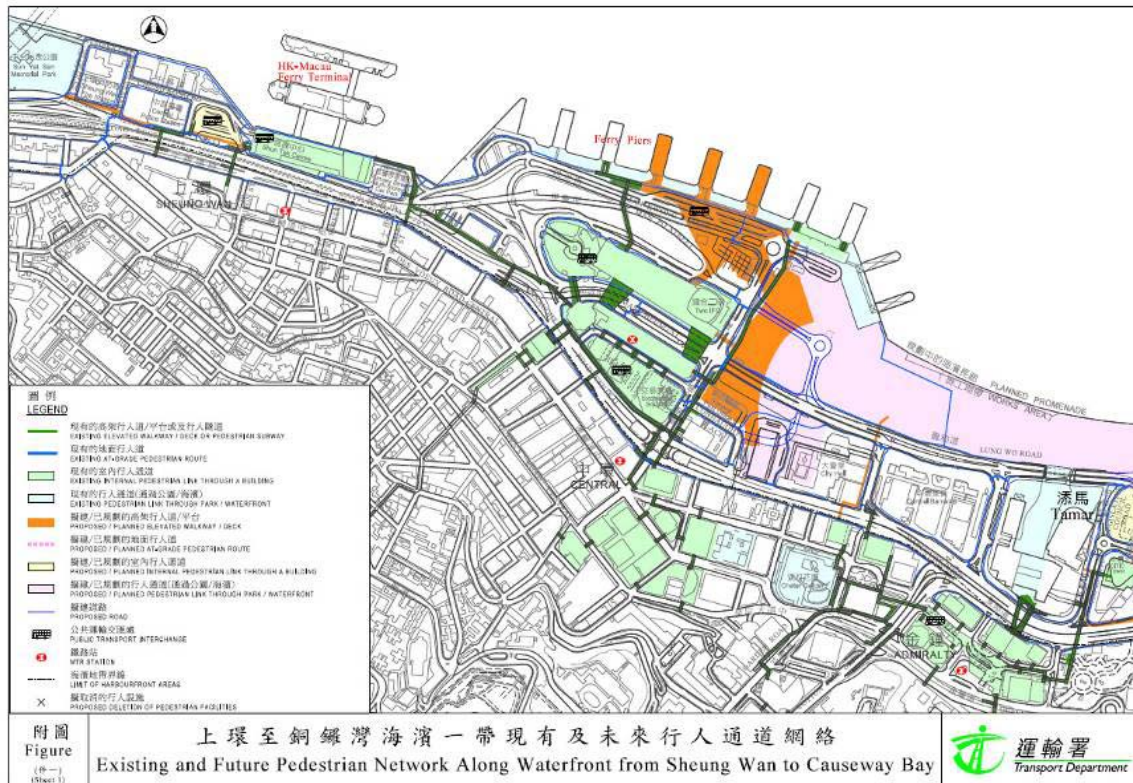


Figure 2. Existing and future pedestrian network at Central. Source: Hong Kong Transport Department.

3. Evolution of the Multilevel Pedestrian Network in Planning History

The multilevel pedestrian network was generally proposed in relation to three types of plans: (1) redevelopment plans of old city centers; (2) the new town plan; and (3) the MTR's “Rail-Property” programs. Sir Patrick Abercrombie was the first planner to propose a traffic-free town center for Hong Kong. In the *Hong Kong Preliminary Report* in 1948, Abercrombie observed that the crowded shops at the ground floor of Central's offices started encroaching on the second floor, and there was no large shopping center in Central. Abercrombie called for a

comprehensive redevelopment for a traffic-free town center.¹⁷¹ Eventually, the idea of a car-free activity center came to dominate Hong Kong's early new town planning. Simultaneously, in an early stage review of the plan of the Sha Tin new town, the Hong Kong Society of Architects suggested the adoption of the town center models of Vallingby in Sweden and Cumbernauld in Scotland as guidance in laying out Sha Tin's self-contained town center. As a result, the spatial pattern of "megastructure," in Vallingby and Cumbernauld, began to affect Hong Kong's town planning with an intention to contribute to the public good.¹⁷²

Central Area Redevelopment (1961) recommended smooth and convenient movement of pedestrians as important as that of vehicular traffic flow. It suggested that this could best be achieved by linking pedestrian areas with one another by means of pedestrian ways, taking the form of either subways or bridges, or controlled or uncontrolled pedestrian crossings. The system was intended to be economically advantageous to the associated shops. The plan also recommended Birmingham Inner Ring Road and South Barbican Scheme to be the models for Hong Kong to emulate. The two examples mentioned had pedestrian subways or overpass crossings with 200 yard intervals and with 18 foot clearance for overhead system. As the former chapter notes, this was an idealist proposal due to its ignorance of Hong Kong's every-increasing

¹⁷¹ Patrick Abercrombie, *Hong Kong Preliminary Planning Report* (Hong Kong: Hong Kong Government Printer, 1948).

¹⁷² See Roger Bristow, *Hong Kong's New Towns: A Selective Review* (Hong Kong & New York: Oxford University Press, 1989), p.247; John R. Gold, "The Making of a Megastructure: Architectural Modernism, Town Planning and Cumbernauld's Central Area, 1955-1975," *Planning Perspectives*, Vol 21 (2006), pp.109-131.

density. Hong Kong's pedestrian crossing and decks turned out to be increasingly integrated into the public transit, the topography and the retail spaces of Hong Kong, which can hardly analogized to any instance in the West. However, *Central Area Redevelopment* determined the basic route of the pedestrian network which was incorporated into later implementations (Fig. 3).

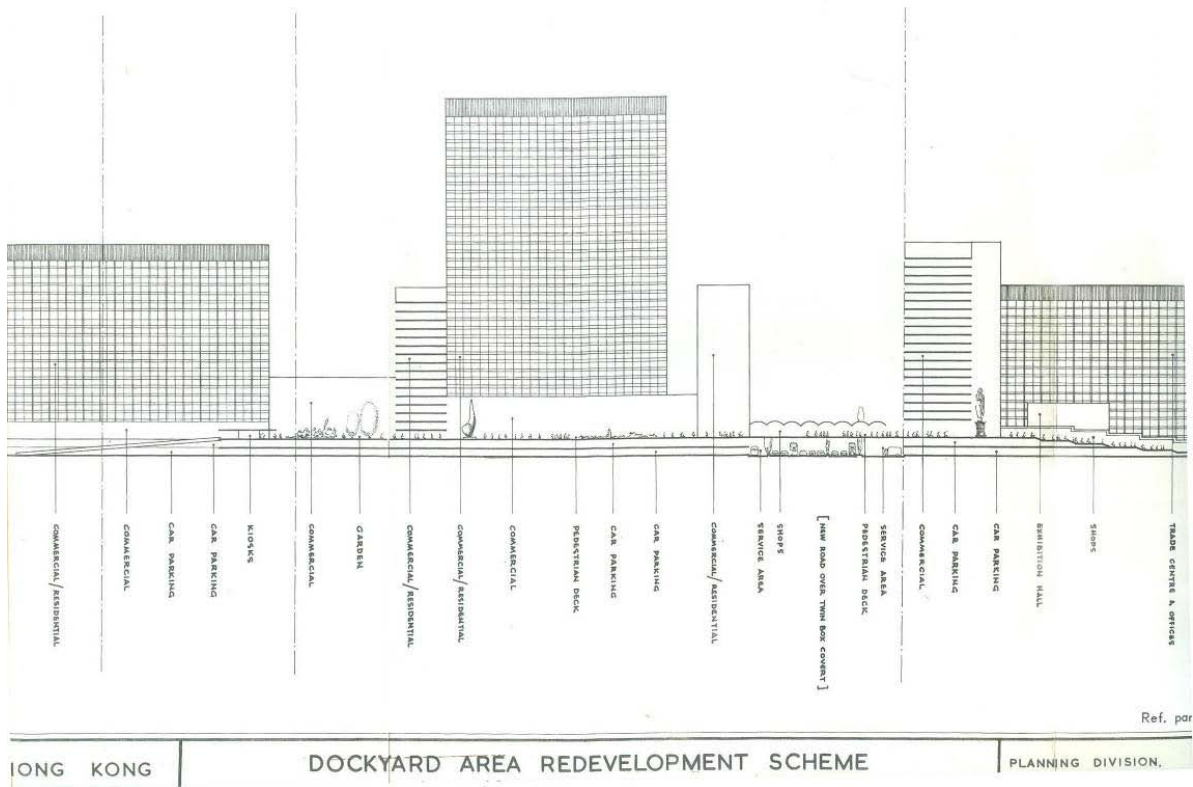


Figure 3. Dockyard Area Redevelopment Scheme, the section.
Source: *Central Area Redevelopment*, Hong Kong: Government Printer, 1961.



Figure 4. Traffic architecture and urban transport integration.
Source: Buchanan, *Traffic in Towns*.

In the 1960s, Professor Colin Buchanan's report on traffic in towns became a widely acknowledged planning code in Commonwealth nations¹⁷³ (Fig. 4). In an essay "Planning in Hong Kong" published in the *Far East Architect and Builder* magazine, R.C. Clarke, the assistant superintendent of Crown Lands and Survey Office, outlined the planning problems that Hong Kong was facing. He observed that "space on pavement is becoming wholly inadequate for the pedestrians." In spite of the growing domestic buildings, "the occupants eventually return to ground to horizontal movements in two dimensions" and the city was unable to provide adequate public communication at ground level. Thus, he expressed his support for a "two level circulation (in city centers) with pedestrian able to move freely over large areas segregated from

¹⁷³ Colin Buchanan, "Report of the Public Inquiry Concerning Development on the Monico Site at Piccadilly Circus," *The Town Planning Review*, Vol. 31, No. 4 (January 1961), 241-289. Also Colin Buchanan, *Traffic in Towns: A Study of the Long Term Problems of Traffic in Urban Areas, Reports of the Steering Group and Working Group Appointed by the Minister of Transport*, London: H.M.S.O., 1963.

wheeled traffic.”¹⁷⁴ The implementation of grade separation has been developed as a solution to reconcile the conflict between the ever-growing auto traffic and pedestrians.

The increasing conflicts between maintaining a pedestrian-friendly city and massive urban transformation became a major concern when Hong Kong was rapidly modernizing its built environment in the 1960s and 1970s. In a 1968 Rediffusion Television, now Asian Television (RTV), panel discussion entitled “Architecture in Hong Kong” between four leading Hong Kong architects (Christopher Haffner, Alan Fitch, Edwin Wong and James Kinoshita, interviewed by John Fawcett), elevated pedestrian linkage was suggested by Haffner as a way to make full use of the existing spatial potential.¹⁷⁵ Haffner suggested that higher-level pedestrian circulation be planned for Central to connect the major business area with the Star Ferry concourse so that “pedestrians could walk from shopping arcades to shopping arcades without having to nip through busy streets.” He also proposed a similar circulation system in the Naval Dockyard (now Admiralty). Yet, other panelists, Edwin Wong in particular, were more concerned about the “human scale” and public open spaces within urban areas, as Hong Kong was on the cusp of a new construction boom. Wong, opposing Haffner’s pro-urban vision, insisted that the Dockyard should be left as open spaces. Thus, the debate centered on coming to a new spatial solution that retained a human scale in a dense development area. In retrospect, some agreement did result from this public talk:

¹⁷⁴ R.C. Clarke, “Planning in Hong Kong,” *Far East Architect & Builder*, January 1965, 54-55.

¹⁷⁵ See *Far East Architect and Builder*, January 1968, pp. 43-46.

1. A multi-level circulation system should be built in Central.
2. Crowding not only poses problems, but also indicates opportunities to planners.
3. Urban proposals “measured in terms of dollars” should be put forward with respect to the public good.
4. More “self-contained” communities developed in a “cellular” way should be proposed to satisfy the housing demand and to reduce long-distance travel.

The term “self-contained” has two implications: first, people working, recreating, and living in the same area; second, strong community interaction and belonging. In 1969, a “future urban form” concept was introduced in the *Colony Outline Plan* by the Crown Lands and Survey Office (Fig. 4).¹⁷⁶ *Colony Outline Plan* anticipated an urban form comprising self-contained “cities within a city,” and called for a “new approach to land use planning and development so as to allow for a greater degree of vertical integration of urban functions which already exists in a haphazard form in many districts.” *Colony Outline Plan* profiled a multi-deck city with community uses, public podia, flats, local shops, workshops, retail uses and parking, all integrated into one megastructure riding on a metro line. *Colony Outline Plan* acknowledged that spontaneous vertical integration had appeared “in a haphazard form” in Hong Kong, and

¹⁷⁶ See Hong Kong Crown Lands and Survey Office, *Colony Outline Plan*, Book 3 (Hong Kong: Crown Land and Survey Office, 1969), pp.31-33; Roger Bristow, *Hong Kong’s New Towns: A Selective Review* (Hong Kong: Oxford University Press 1989), 235.

explicitly suggested public-private cooperation for future urban development. The *Colony Outline Plan*, despite being a strategic plan of no statutory status, deeply influenced the spatial restructuring of Hong Kong in the MacLehose Era.

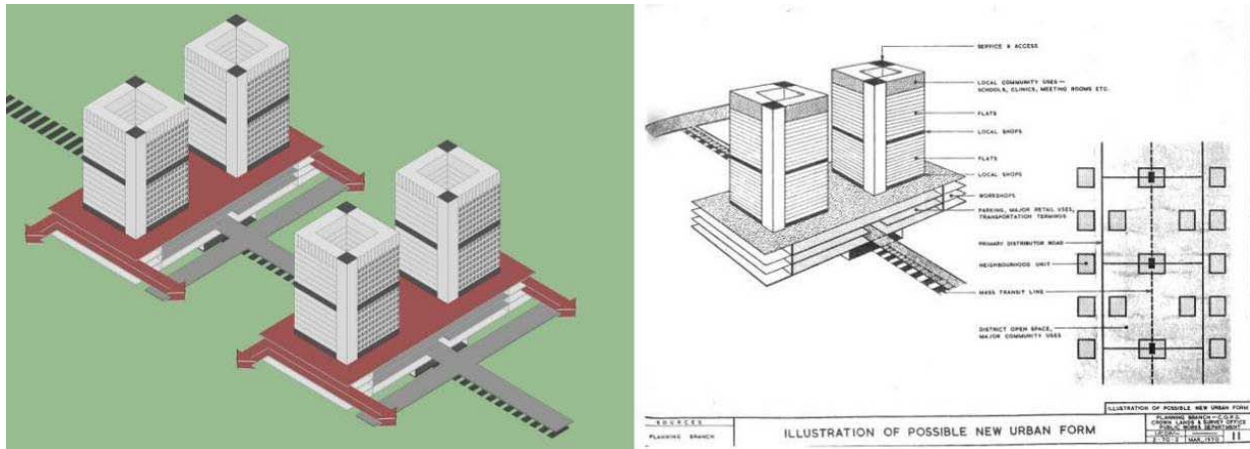


Figure 4. A diagram (left) of the ‘New Urban Form’ introduced in the *Colony Outline Plan*, 1969. Reproduced from the original diagram provided by the Planning Department (right).

The pragmatic planning in Hong Kong should not be equated with a planning practice without an overall vision. When Murray MacLehose became Governor of Hong Kong in 1971, more specific propositions were raised with a sequence of actions in housing, infrastructure, and social welfare as a whole. The New Territories Development Department (NTDD) was established in 1973 as an independent government agency to implement the New Town Development Program. The basic concept for building a new town was to provide a balanced and self-contained community in terms of the provision of infrastructure and community facilities. Each neighborhood should have its own activity center, in most cases a car-free precinct, incorporating mixed community services to meet the daily needs of residents. Sha Tin and Tuen Mun (Castle Peak) were the first comprehensively planned new towns. They both have town centers with a variety of urban functions on a shared and networked pedestrian platform, with shopping arcades

annexed by both private and public skywalks.

The future of Hong Kong was determined by the Sino-British Joint Declaration in 1984, and Hong Kong increasingly played a critical role in the rapid urbanization of the whole Pearl River Delta rather than an autonomous port city. The 1990 *Metroplan*, as the last colonial plan for Hong Kong, presented new thoughts from both interested individuals and community groups, and provided a framework with which both public and private sector agencies can formulate detailed plans and development programs on a spatial basis.¹⁷⁷ Compared with the 1969 *Colonial Outline Plan*, *Metroplan* recommended taking more account of certain broad design principles and guidelines to enhance the three-dimensional form and character of the city. *Metroplan* suggested that pedestrian network should be provided in major commercial areas containing shops and offices with high density of pedestrian movement. These pedestrian networks should be “continuous, high capacity, grade-separated, all weather, noise protected routes for pedestrian circulation.”

In the booklets printed as public records for *Metroplan*, the urban design concepts of an “Enclosed Pedestrian Street” and “(Pedestrian) Movement through Buildings” were illustrated by a few diagrams. These diagrams knit together the footbridges, podiums, subways, car parks,

¹⁷⁷ The *Metroplan*, as a democratic urban design exercise, was published in the form of a few booklets. See Planning Department, *Metroplan: The Foundation and Framework* (Hong Kong: Hong Kong Government Printers, 1990); Planning Department, *Metroplan: The Selected Strategy; Executive Summary* (Hong Kong Government Printer, 1991); Planning Department, *Metroplan: The Selected Strategy; An Overview* (Hong Kong: Government Printers, 1992). The author also consulted Planning Department, *The Stage II Study on Review of Metroplan and the Related Kowloon Density Study Review*, retrieved March 1 2013, http://www.pland.gov.hk/pland_en/p_study/comp_s/metroplan/metro_es/final_e.htm

atrium, and lobbies into a unified environment. *Metroplan* anticipated more extensive, multi-level pedestrian systems linked to major transport interchanges and commercial programs. The public pedestrian routes should supposedly penetrate different functions at different levels and assemble a stratified urban environment. What should be noted is that *Metroplan* auspiciously promoted “an environment protected from noise and air pollution” and “public exhibitions and events,” signaling Hong Kong’s embracing postmodern, service-oriented industry¹⁷⁸ (Fig. 5).

¹⁷⁸ Planning Department, *Metroplan: The Selected Strategy, Executive Summary*; Planning Department, *Metroplan: The Selected Strategy; An Overview*, 1992.

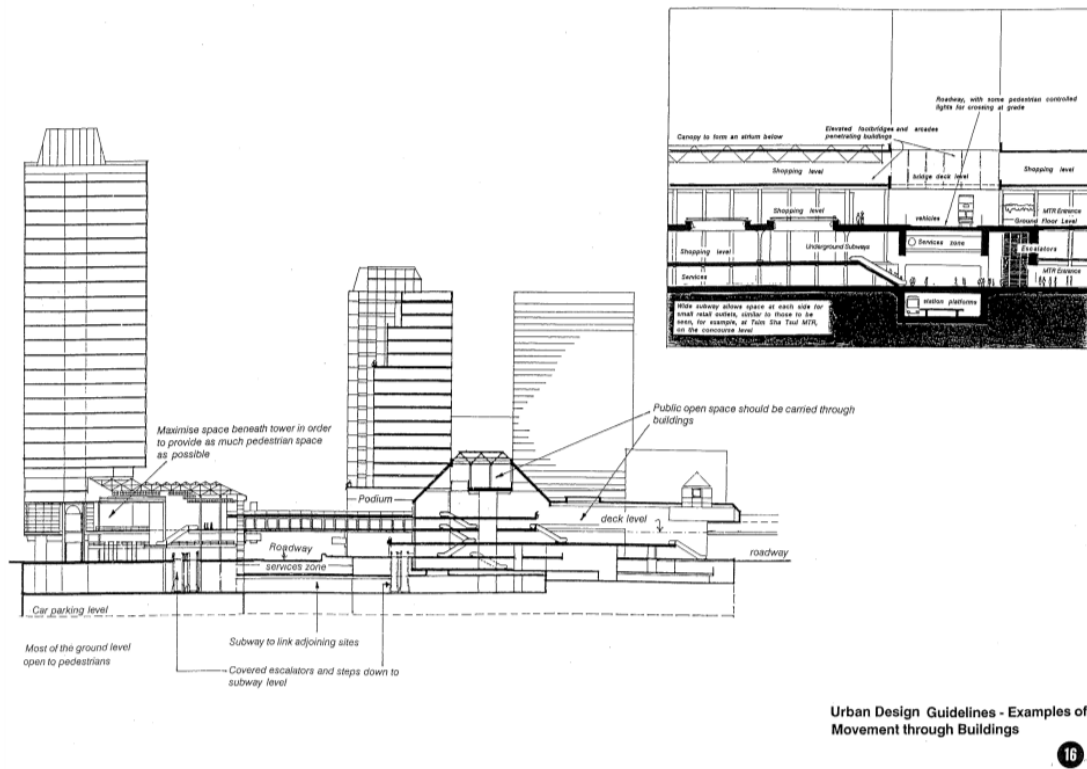


Figure 5. Urban design guideline-examples of movement through buildings.

Source: Planning Department, *Metroplan: The Selected Strategy; Executive Summary*, Hong Kong Government Printer.

In the 1980s, by going public, a number of local Chinese developers grew rapidly as major players, and they preferred to work with architects who spoke Chinese. This marked the beginning of private sectors' increasing conscious involvement in manipulating public spaces. The late 1980s bore witness to a group of emerging local architects and urban designers who

started to reflect on the vertically integrated urban environment in a more critical way, of whom Rocco Yim is representative. Yim's concepts of "urban connector" and "fluidity" dominate his architectural projects in activity centers of Hong Kong.¹⁷⁹ In the introductory essay of his monograph, Yim defined his idea of the 'urban connector' as follows:

The city's urban connectors, some by expedience, others by intent, have now grown from simple disjointed linear elements into a multi-directional and multi-dimensional network.....The architecture is an inside-out process, where a contiguous series of connector spaces in various guises; bridge, atrium, open deck, subway are composed as a continuous route that knits together the social, traffic, circulation and open space systems in the neighborhood.¹⁸⁰

As town planning bowed more and more to corporate power and highlighted the government's political scorebook, the urban design criteria was relegated to a set of regulations that dismissed site-specific conditions. Pedestrian networks became a compulsory "privately owned (leased) public space."¹⁸¹ Governor Murray MacLehose's Neo-liberalism was founded on the continual growth of social welfare and infrastructure. This policy marked Hong Kong's embracement of "Buchananism," which was adopted to maximize the health, safety, convenience and the public

¹⁷⁹ E. Hope, E and K. Ryan (eds.), *The City in Architecture: Recent Works of Rocco Design Limited* (Mulgrave, Victoria: Image Publishing, 2002), 14, 20.

¹⁸⁰ *Ibid.*: 20.

¹⁸¹ See Jerold S. Kayden, *Privately Owned Public Space: The New York City Experience* (New York: Wiley, 2000).

good of the community.¹⁸²

4. Selected Case Studies

This part investigates two distinctive urban scenarios, in which networked pedestrian circulation systems largely contribute to the internal connectivity of two urban cores: Sha Tin town center and the IFC-Hong Kong Land complex in Central. The two sites are involved in two different external contexts, yet exhibited similar pedestrian patterns. While Sha Tin were built according to a detailed master plan prepared by government agencies and consultants (particularly Robin Edmond in conjunction with Yuncken Freeman), major pedestrian network of Central was built to enhance the overall business environment of Central. Both sites bore witness to accumulative urban gentrification from the 1970s to 1990s. Compared with other urban nodes in Hong Kong with comparable spatial patterns (such as East Mong Kok, Hung Hom, and Tai Koo Shing), Sha Tin town center and Central demonstrate far more complicated patterns of intensive land use and attracted more public attention and literature. More attention would be drawn to the following aspects:

1. The historical context in which the multi-level pedestrian networks of the two sites were set.
2. The role of architects, consultants, and government planners in mediating the multiple pursuits of different stakeholders.

¹⁸² J. M. Wigglesworth, "The Development of New Towns" in *Asian Urbanization: A Hong Kong Casebook*, ed. D.J. Dwyer (Hong Kong: Hong Kong University Press, 1971), 48-69.

3. The relation between the spatial pattern and the correspondent manipulation of a business structure and order.

Case Study 1. Town Center of Sha Tin

Prior to the town center of Sha Tin, the elevated pedestrian deck (sometimes on a podium) had been used in large housing estates. Wah Fu village was the first comprehensively planned settlement which illustrated the concept of grade-separated, unimpeded pedestrian zones. The pedestrian podium of Wah Fu village was planned to be directly accessible from the street level, linked through a footbridge to neighboring amenities and anchored by a 3-story complex (Fig. 6). The elevated pedestrian terraces became the extension of the interior shopping arcades with landscape features. Such spatial pattern set precedence for later large-scale pedestrian network in major new towns and city centers. Mei Foo Sun Chuen's (Mei Foo New Estate, Hong Kong's largest private residential estate in the 1970s) networked podium deck is another manifestation of the zeitgeist in the 1970s. At that moment, Hong Kong's industrial boom gradually closed the economic gulf between the rich and the poor. The emerging middle class population's growing needs for a more secure and decent environment demanded a networked, landscaped podium deck as a spatial statement of a self-contained community.



Figure 6. Pedestrian podium of the town center of Wah Fu Village.
 Source: Far East Architect and Builder.

As the Mark I new town of Hong Kong, the planning of Sha Tin was studied as early as 1961. In the HKSA's (predecessor of Hong Kong Institute of Architects) review of the Sha Tin plan (LST 17) in June 1961, a town center located above a railway line was suggested, a plan that was modeled after Vallingby and Cumbernauld.¹⁸³ The town center of Cumbernauld was conceived to be a self-contained megastructure with a cluster of multi-decked structures overlaid each other, located on an arterial driveway, which reflects the pursuit of both mobility and urbanity. As the British political climate turned conservative the financial support for such utopian experiment could not be sustainable. However, its architecture and planning rationale was reported internationally and exerted a major impact on Hong Kong.

¹⁸³ John R. Gold, "The Making of a Megastructure: Architectural Modernism, Town Planning and Cumbernauld's Central Area, 1955-1975," *Planning Perspectives*, Vol 21 (2006), 109-131.

The Territory Development Department was formed in 1973 and, in the same year, the plan of Sha Tin was originally created. The area in the vicinity of the East Rail Sha Tin Station was originally developed as a natural extension of the old market, which was very popular amongst the adjacent rural population. In the 1970s, Sha Tin, along with neighboring Tai Wai, were rapidly growing settlements in the New Territories. The old market, serving the local working class, was razed in the late 1970s to make way for a new town center for potential middle class residents. Thus, one purpose of creating a brand-new town center here is to accommodate those self-employed shop owners in a modern marketplace with evenly distributed pedestrian accessibility.¹⁸⁴ As a result, new town planning provided the growing settlements new town a concentration of shopping facilities and a major public transport interchange. The cultural complex, which is linked with the Sha Tin Station by commercial development, is the principal focus of the town centre of Sha Tin providing comprehensive facilities including a public library and a town hall. As the cultural complex is located within the low-rise civic spine, it is visually dominant from the surrounding pedestrian areas. Sha Tin Law Courts are located beside the cultural complex. The Sha Tin Park, situated between the cultural complex and the Shing Mun River, complements the development in the town centre. It is the focus of the open space theme along the Shing Mun River. Shops, offices, cinemas and other commercial and recreational facilities can also be found within the town centre.

¹⁸⁴ Early retail complex in Shatin town center, such as Shatin Center and Lucky Center, feature tiny local stores on a large floor plate.

In the planning process of Cumbernauld, the Mark I schemes of British new towns were criticized for their appearance of ‘pseudo-village-greens’ and for being detrimental to civic pride. The “megastructures,” in contrast, were argued to be able to assist “urban concentration” and provide a sustainable urban solution.¹⁸⁵ These discussions were noted by Hong Kong planners. The concept of “activity center” prevailed in the development of new town civic centers.¹⁸⁶ The all-in-one urban form was intended to contribute to an introverted urban utopia in the sea of urban chaos. The integrated pedestrian network became a social instrument to resolve functional conflict and congestion in Hong Kong.

The first Outline Development Plans for Sha Tin was approved and published in 1962. A draft plan of Sha Tin published by *Far East Architect and Builder* in 1965 indicates that a multi-purpose commercial residential development would be put into place to ensure the maximum use of the amenities and segregation of pedestrian and vehicular traffics was recommended at the detailed planning stage. In 1969, the first plan for the center was produced for circulation. This plan featured a series of open spaces and creational areas linked by an at-grade central pedestrian routeway. However, it was doubted for its vulnerability to hawkers, then a negative factor in planning.

The development of new town gained momentum in the 1970s. In 1973, the British planner

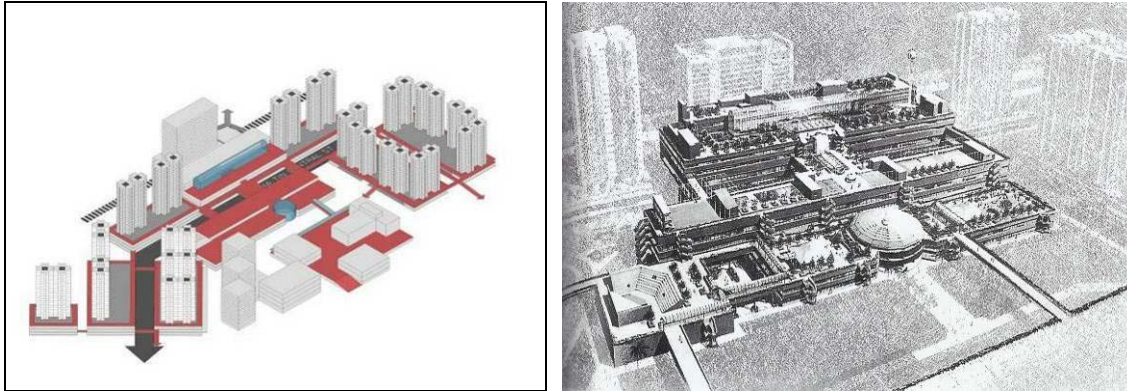
¹⁸⁵ See Gold, “The Making of a Megastructure” and J. Karakiewicz, “The City and the Megastucture,” in *Future Forms and Design for Sustainable Cities*, eds. Mike Jenks and Nicola Dempsey (Oxford: Architectural Press, 2005), 137-142.

¹⁸⁶ See Roger Bristow, *Hong Kong’s New Towns: A Selective Review*, 235.

William Holford was recruited. Holford proposed a plan with a continuous elevated podium deck concentrated on a central commercial core. Again, this plan was opposed by the government as a comprehensive scheme amongst various developers and was considered unpractical. Holford was also involved in the planning of Piccadilly Circus of London in the early 1960s. In the case of Piccadilly Circus, pedestrian segregation was also planned, and William Holford suggested for public and private enterprise to combine in some kind of trust or consortium. This type of consortium was later adopted by Hong Kong MTRC in developing the Hong Kong Station complex. The elevated pedestrian deck and commercial podiums were maintained in the 1976 plan drafted by the Territories Development Department. Thus, a segregated system of pedestrian and bicycle paths would be able to enhance the physical links between activity centers and the neighborhoods. The activity center then evolved into a hub, with radiating spokes extending to peripheral residential blocks.

In 1982, a consulting group led by Australian architect Robin Edmond, in conjunction with Yuncken Freeman, was appointed to develop a master architectural guide for Sha Tin town center. This conceptual plan determined the spatial structure of Sha Tin town center as built, including the pattern of elevated pedestrian links. This guide provided a larger single-use retail center as a circulation hub for the entire Sha Tin new town. The consultant's recommendation of urban forms could be actualized through the compulsory lease terms. The lease terms stipulated reserved public spaces including the construction and linking of shopping podiums, and pre-determined levels and boundaries in accordance with plans and models. The lease terms somehow resolved the conventional private-public conflicts in Holford's original proposal, and ensured the permeability and accessibility of the space throughout the town center. It is noteworthy that the provision of a single-ownership, relatively low-rise town center, the Sha Tin

New Town Plaza, expedited spatial integration in the future (Figs. 7, 8).



Left: Figure 7. A diagram showing the pedestrian network of Sha Tin town center (highlighted in red), reproduced from Yuncken Freeman architects' original scheme.

Right: Figure 8. A model of Sha Tin New Town Plaza by Sun Hung Kai's project manager K.M. Chan. Source: *Building Journal*, Oct 1983.

In the final plan of Sha Tin, the impact of the enormous building masses was diluted by the permeability of the spaces. The relatively low rises of the central part were planned to smooth the pedestrian movements from the train station to adjacent estates, cultural amenities and open spaces. Parking was originally not provided in the land lease. However, in order to attract more potential visitors who own cars, Sun Hung Kai, the largest property owner of Sha Tin town center, approached the Hong Kong Government and, after several rounds of negotiation, offered to allocate more amenities for the public in exchange for a permission of more parking spaces. This move turned out to be a win-win solution because the retail space can be more integrated with the surrounding motorways. Lastly, the networked pedestrian-friendly gallerias, skywalks,

and amenities on roof gardens offered family-friendly experiences to distract attention from the anonymous residential towers. An equally grade-separated and uninterrupted cyclist system was provided to link the Sha Tin Town Center with peripheral estates, industrial areas, and open spaces.¹⁸⁷

In 1984, Sha Tin's New Town Plaza opened. In 1990, Phase III of New Town Plaza was built with the addition of three floors of shopping galleries. In fact, New Town Plaza has been one of the most popular attractions in Hong Kong since it opened in 1984. The lease conditions for the New Town Plaza ensured that a certain amount of shared and around-the-clock spaces should be reserved for the local community. From the 1980s, the arising Chinese enterprises has been engaging more actively with manipulating spaces on an urban level in Hong Kong. Presently, New Town Plaza is integrated with a cluster of facilities and programs, including the Kowloon-Canton Rail Station (KCR station), office towers, a residential hotel, town hall, a 30-bus terminus and magistracy. From west to east, if arriving by train, a visitor would experience the existing KCR station (now owned by MTR), Citylink Plaza (an MTR property) and pedestrian bridge over Taipo Road, shopping arcade I, pedestrian bridge from shopping arcade I to II, shopping arcade II and finally the civic center and the waterfront park. Yet, such an arrangement prompts the appropriation of Sha Tin town center's public space. The efficient organization of the spaces exerted large amount of revenue for business owners, while

¹⁸⁷ K.S. Pun, (1989) "Urban Design Considerations in Hong Kong New Towns," in *Contemporary Architecture in Hong Kong*, ed. W.N. Chung (Hong Kong: Joint Publishing, 1989), 32-38.

maintaining relatively low cost for management. The roof decks, passage areas and footbridges work together to become an integral part of an economic machine (Figs. 9,10).

As the functional core of Sha Tin town center, New Town Plaza was designed so as to minimize its overarching size and separate its several functions into manageable sections. On the one hand the absolute predominance of Sun Hung Kai' property in the town center and the once "flagship" tenancy of Japan's Yaohan Department Store ensured the consistent spatial quality of such a large-scale pedestrian network. On the other hand, the holistic spatial organization coerced the pedestrians from KCR station into a consumer environment where shopping becomes a compulsory everyday exercise. Meanwhile, the entire Sha Tin town center demonstrates a clear and centralized business hierarchy. Based on the author's observation, the environmental quality drops sharply as the pedestrian network departed from the high-end shopping center (New Town Plaza) and entered into those peripheral low-end mixed-use complexes (such as Wai Wah Centre and Lucky Center). Sha Tin's pedestrian network reflects the ordering of land values of each parcel and, hence, reinforces a hidden spatial hierarchy for the entire business area. Moreover, Sha Tin town center today is no longer a service hub for neighborhoods of the New Territories, but a popular shopping destination for visitors from the entire Pearl River Delta. It should be noted that the town of Sha Tin was originally planned for an ultimate population of about one million, however, the current population is about 0.65 million, and the activity center turned out to be disproportionately oversized for local neighborhoods. In the meantime, local residents have

been increasing unable to purchase its luxury goods and services. Sha Tin town center is presently a top shopping destination for tourists from across the Shenzhen River, thanks to its accessibility through the Kowloon Canton Railway (now, the East Metro Line operated by MTR).¹⁸⁸

Table 1. Privately-owned public passages and spaces within the Sha Tin Town Center

Phase I New Town Plaza (Sun Hung Kai)	
Passage Areas	They are located at Levels 1-3 and are accessible from the Sha Tin Railway Station, Bus Terminus, Sha Tin Centre, Wai Wah Plaza, Sha Tin Plaza, New Town Plaza (Phase III), Sha Tin Town Hall and the New Town Tower.
Footbridges	There are 4 footbridges at Levels 3 and 4. They are accessible from Sha Tin Railway Station and Sha Tin Centre.
Footbridge Connections	There are 3 footbridge connections at Level 3 and 4. They are accessible from New Town Plaza (Phase III), Sha Tin Town Hall and New Town Tower.
Public Car Park	It is at the lower basement and is accessible from Sha Tin Centre Street.
Landscaped Roof Decks	They are located at Levels 3, 5, 7 and 9.
Recreational Facilities	They are located at the lower basement, upper basement, Levels 3 & 5.
Phase III New Town Plaza	
Footbridge	It is at Level 3 and Level 4 and accessible from New Town Plaza.
Public Car Park	It provides not less than 160 and not more than 220 private carparking spaces and is accessible from Sha Tin Centre Street.
Amenity Areas	It is accessible from Sha Tin Centre Street and Pak Hok Ting Street.
Layby	It provides 'picking up and setting down area' for taxi and private cars and is accessible from Sha Tin Centre Street.
Wai Wah Centre	

¹⁸⁸ The planning of Shatin town center brought about the concept of “Comprehensive Development Area”(CDA) zoning, which was adopted to prevent hazardous piecemeal redevelopment. Yet, the diversity of lifestyles is sacrificed and space becomes an economic element.

Passage Areas	They are located at Level 1, Level 2, Level 3 and Level 4 and are accessible from Sha Tin Centre Street.
Scenery Court	
Pedestrian Footbridges	There are two footbridges at Levels 3 & 4 and they are accessible from Sha Tin Centre Street.
Pedestrian Walkways	They are located at Level 1, Level 3 and Level 4 of the development.
Lucky Plaza	
Pedestrian Walkways	They are located at Levels 1-4 and are accessible from the Sha Tin Centre and Sha Tin Market.
Public Car Park	It is accessible from Wang Pok Street.
Sha Tin Centre	
Pedestrian Walkways	They are located at Levels 1-4 and are accessible from the Lucky Plaza, New Town Plaza, Sha Tin Plaza and Sha Tin Town Hall.
Footbridges	There are 4 footbridges and they are accessible from the Lucky Plaza and Sha Tin Town Hall.
Public Car Park	It is accessible from Tam Kon Po Street.
Hilton Plaza	
Public Car Park	It provides 209 car parking spaces and is accessible from Sha Tin Centre Street.
Passage Areas	They are located at Level 1, Level 2, Level 3 and Level 4 and are accessible from Sha Tin Centre Street.



Figure 9. The multi-level pedestrian skywalks in the town center of Sha Tin. The images show the vertical ordering of city streets, ground floor shops, car parks, pedestrian level, and private platforms for the residents.

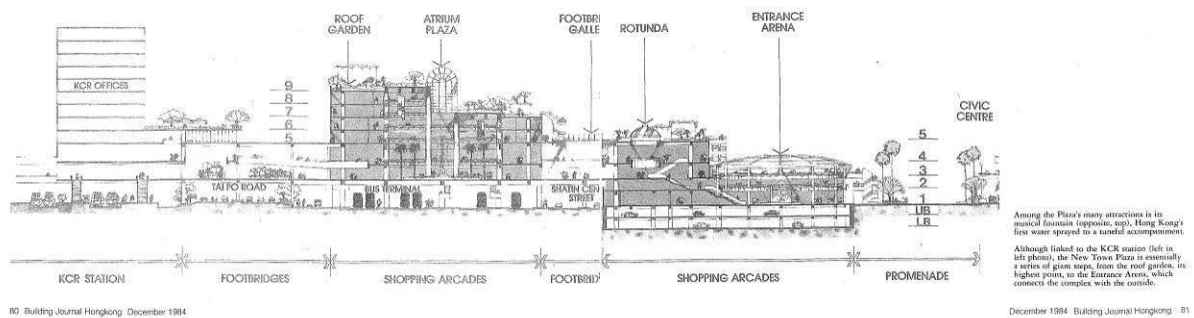


Figure 10. A cross-section showing the continuous pedestrian space from KCR Station to the Civic Center of Sha Tin. Source: *Building Journal*, Dec 1984.

Case Study 2. Pedestrian Network in Central

In contrast to Sha Tin, the integration of Central's retail space began as a more spontaneous

process. Footbridges, as the key components of the elevated pedestrian networks, were proposed and constructed as early as the late 1950s in Hong Kong. The early footbridges were temporary scaffolding structures built of timber or bamboo (Fig. 11). The networked pedestrian system of Central originated from the footbridges primarily built by the private land owner, Hong Kong Land. The first perpetual private footbridge in central, designed by Parmer and Turner Architects, was built in 1965 to connect the Mandarin Hotel and Prince's Building. The complex of Charter House, Alexander House, Prince Building, Mandarin Hotel and Landmark was connected by a private pedestrian network. This pedestrian network penetrated into the indoor floor space through "areas within private properties dedicated for public use" (a mechanism implemented before the POPS practice was settled around 1980). These original elevated bridges were sheltered and partially air-conditioned. In 1974, the Hong Kong Land announced a HK\$600 million Central Redevelopment Scheme which included a 1,869 square meter pedestrian plaza of Landmark (Gloucester Tower), which is the first modern atrium of its kind in Hong Kong. Landmark is the latest stage of Hong Kong Land's redevelopment scheme, creating a private elevated pedestrian network across a large catchment area around Central Station (then Charter Station). The large atrium at the focus of the pedestrian routes of the Hong Kong Land property complex is also a setting for "happenings" such as exhibitions, arts festivals, and concerts. At about the same time, the Hong Kong and Shanghai Bank by Foster Associates was also designed to accommodate continuous pedestrian movement through an open ground floor concourse set back from the adjoining streets.

In 1973, the first stage of a public pedestrian network was completed, starting from the mezzanine level of the then Connaught Centre, spanning at a height of 16'9" over Connaught Road, touching at Union House and then running over Pedder Street (the clearance is very close

to the suggestion of *Central Area Redevelopment*, 1961). In 1984, Hong Kong Land spent another twenty million HKD to upgrade both the interior and exterior of the footbridge, and the stairs which connect to pavement level, Connaught Center and the new Exchange Square. The upgrade also included adding protection against Hong Kong's strong winds and infamous rain season. The exterior was refurbished to match the recently completed cladding of Connaught Center. This section, along with the existing and proposed private skyways built by Hong Kong Land to connect its own properties, metamorphosed into a network of internal pedestrian arcades. The land owners of Central soon recognized the added value brought by the tremendous pedestrian flow. They soon became integral components of an enormous network kitting together all major commercial developments in the area.

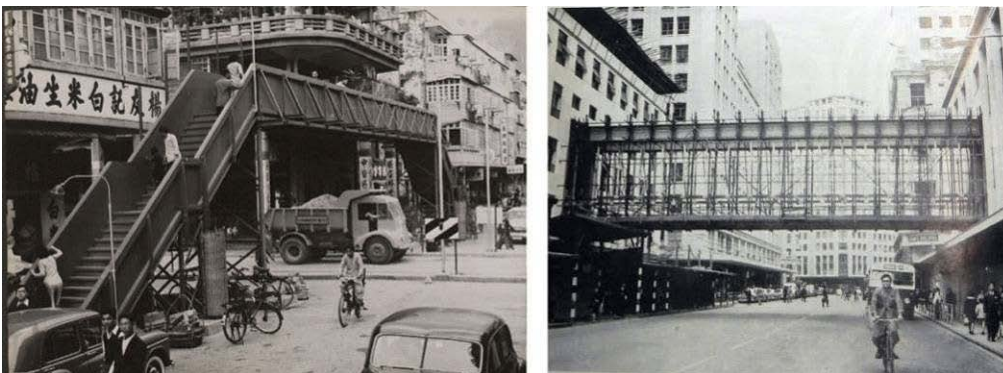


Figure 11. 1950s temporary footbridge and 1965 steel footbridge on Chater Road.
Source: Hong Kong Public Records Office, and *Far East Architect and Builder* magazine.

In 1976, the pedestrian network of Central entered into a new stage with the introduction of metro lines. MTR signed an agreement with Cheung Kong to develop a 26-story tower at the old

General Post Office site. The tower was intended to house retail arcades leading to the concourse of Chater Station (now Central Station). The completion of Chater Station established a catchment area above it, distributing a stable pedestrian influx over a broader area of Central. As earlier as late 1970s, MTRC started to embark on property development.¹⁸⁹ By integrating a multitude of programs and circulations around metro stations, the MTRC became a powerful player in shaping uninterrupted pedestrian networks in Hong Kong.

The experience of building several generations of pedestrian networks culminated in the development of Hong Kong Station on a reclaimed land at the Victoria Harbor. After the Tiananmen Square Protest in 1989, the *PADS (Port and Airport Development Strategy)* was raised to restore confidence amongst Hong Kong people. The airport relocation and the new airport metro line were suggested by the *PADS*. Hence, nearly 80,000 commuter line and express line passengers were anticipated to be added to the pedestrian flow of Central at every peak hour with the completion of Hong Kong Station.¹⁹⁰ In the early stage of the airport line planning, the MTR consultants developed a series of design guidelines for stations of the future airport line. Central to the guideline was that a circulation interface should be built between the station and its attached property and the surrounding urban functions. Thus, IFC complex eventually replace Hong Kong Land complex to be the new hub for the pedestrian circulation of Central. Although most grade-separated walkways and retail galleries were rarely used for purposes other than

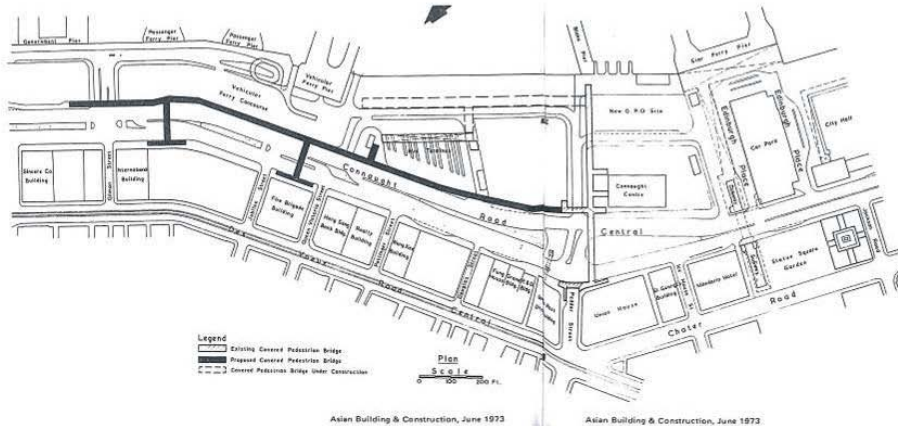
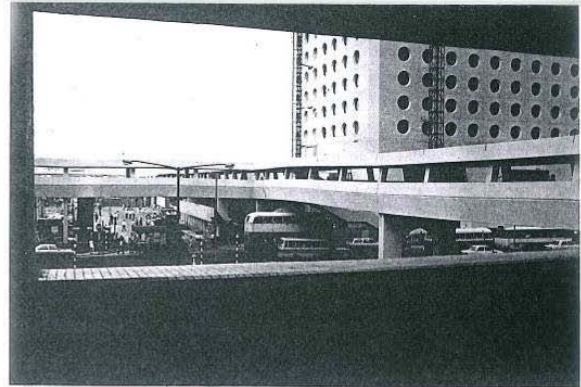
¹⁸⁹ Mass Transit Railway Corporation, *Official Souvenir Book to Commemorate the 1st Day of Running MTRC Trains* (Hong Kong: Mass Transit Railway Corporation, 1979).

¹⁹⁰ See Greg Pearce, ed., *Arup: Hong Kong Station* (Stuttgart/London: Edition Axel Menges, 2001).

passages, it inarguably demonstrated a new public experience in an urban culture of high density (Figs. 12, 13).

Mile-long pedestrian bridges for Central District

CONCENTRATED development in city centres has brought about congestion not only in roads but also on pedestrian ways. As motor-cars climb on elevated roads, town planners see no reason why pedestrians cannot do the same. Moreover, as an architect observes, "People usually like walking up rather than stepping down." Despite the drawback of taking up road space, bridges are comparatively easy to build and to maintain. For Hong Kong's congested commercial hub, the Central District, the choice seemed obvious. On the drawing board currently is a network of pedestrian bridges, which, if all of them materialize, will form tentacles totalling about a mile in length and knitting together at least half a dozen prestigious commercial buildings in the area. Part of the network is already completed, starting from the mezzanine level of the new 52-storey Connaught Centre, spanning 653 ft at a height of



18'9" over Connaught Road, touching at Union House, and then running over Pedder Street. In fact, the bridge can be considered as an integral part of Connaught Centre, for the developers were required by the Government to provide pedestrian accessibility, understandably because of the fact that the site of Connaught Centre is located on a plot of reclaimed land which was not interwoven with the "traditionally developed" areas further inland. The covered pedestrian way, linked to Star Ferry Pier Concourse, also serves to lure westbound pedestrians away from the existing heavily-trafficked pedestrian subway leading to the overcrowded crossing on Chater Road. But the section over Pedder Street is Government-provided, and so is the small protrusion over the northern footpath of Connaught Road, which may be lengthened at a later date. The bridges were designed by Palmer & Turner and constructed by Gammon (Hong Kong) Ltd (the same architects and contractors as for Connaught Centre); building costs amounted to HK\$3 million. The reinforced concrete bridges,

Figure 12. A 1973 plan showing then existing (in white) and proposed footbridges (in black) in Central. Source: *Asian Building and Construction*, June 1973.

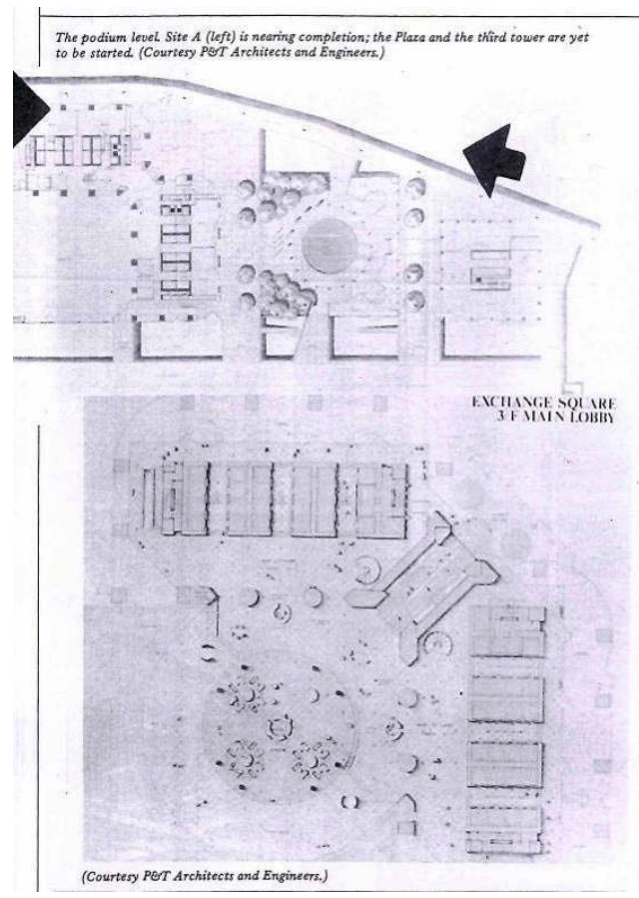
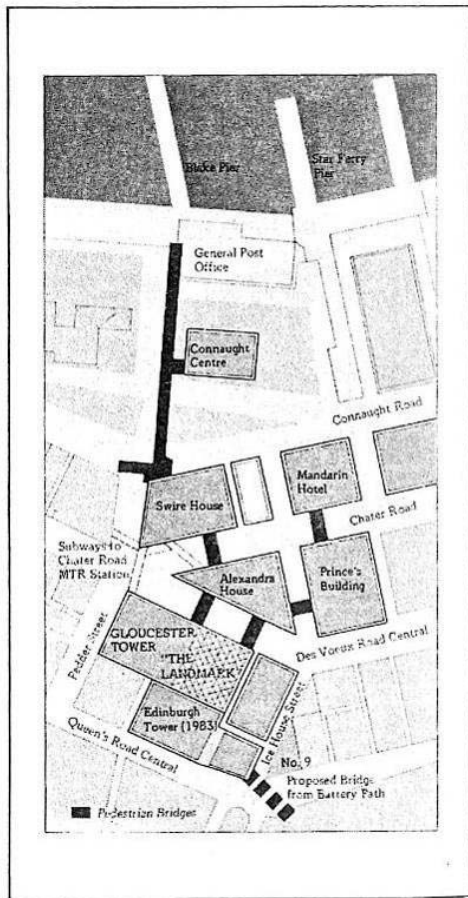


Figure 13. A 1979 plan showing Gloucester Tower as the last stage of Hong Kong Land's HK\$600 million Central Redevelopment Scheme. Source: *Asian Architect and Builder*, Oct 1979.

Figure 14. The original design of the fully enclosed square at the podium level of Exchange Square. The square turned out to be open due to planning authorities' request. Source: *Asian Architect and Builder* (?).

Architects' role was also critical in the arena of competing private and public interests. When the Exchange Square was built in the 1980s according to the design of architect Remo Riva of Parmer & Turner, an environmentally-moderated podium terrace and a superstructure (a four-story forum) between the towers on the first floor were reserved as an integral part of future expansion of pedestrian network. This podium terrace was required by the government's lease conditions. To assess the impact of existing and resulting pedestrian flow through the building, a

pedestrian traffic study was conducted and escalator and stairway provisions were located in line with the outcome of the study. The main entrance to the development at the first floor was located on the axis of two towers, where a sculptured fountain stands. Having won an award for the Landmark atrium and studied such spaces in other countries, Remo Riva hoped to provide a fully enclosed circular plaza furnished with plants, seats, lamp posts and flag poles and a whole set of civic furniture, which was preferred by the land owner. However, town planning authorities did not approve the idea of the enclosed plaza. After negotiation, Remo Riva agreed to have a semi-open 4-story forum, a circular square and an open plaza as integral parts of the walkway system. The long existing walkway along the Connaught Road Central was upgraded by the design team too (instead of by the Planning Department). The column array under the podium was broadly spaced (ranging from 16 meter to 22 meter) to accommodate the bus terminus and the future underground tunnel between Hong Kong Station and Central Station.¹⁹¹

The elevated walkway along the north edge of the Exchange Square was built before Hong Kong Station Phase I was completed, signaling that the underlying pedestrian system usually preceded the property development.¹⁹² Separately built elevated pedestrian zones are sometimes at different elevations. The subtle grade changes between the footbridges, indoor galleries terraces and links were further intermediated and became vibrant spatial features in Central. The

¹⁹¹ This pedestrian subway is designed to cater to 40,000 people every hour and is equipped with a 300 meter travelator system. It was completed and opened to the public for use in June 1998.

¹⁹² G. Ma, *Xianggang gong cheng kao : shi yi ge jian zhu gong cheng gu shi, 1841 -1953* (Hong Kong: Joint Publishing, 2011).

pedestrian circulation revolving around the Phase I and II of the International Finance Center(IFC)-Exchange Square complex and the Exchange Square becomes a hub of elevated walkways, retail arcades and public transits, whilst encouraging the public to navigate different programs and uses smoothly. This walkway system is further connected to ferry piers on the new reclaimed waterfront (Fig. 14).

Although the site of Hong Kong Station was relatively defined with a clear boundary, under Hong Kong Planning law the rules for the station are different from normal developments. As a piece of infrastructure, the station, tunnels, and supporting facilities could extend outside the site. The special status of the site gave architects more flexibility to optimize the pedestrian flows. There were two major advices proposed by the architects which contributed to a complete friendly pedestrian experience. One is that the two super-high-rise towers would be reduced to one tower at the northeast corner, given that the Town Planning Board would waive the height control on the new buildings along harbor front. The second is that the bridges between the Phase I and Phase II developments sites would include multi-level retail galleries. These approaches significantly remove the interference to the pedestrian circulation and harbor views, and create a landscaped rooftop terrace as a waterfront park open to the public. However, the rooftop terrace is connected to the pedestrian network through an indoor atrium and express escalators, which is detrimental to the accessibility of the space for the public who is usually unaware of its existence.

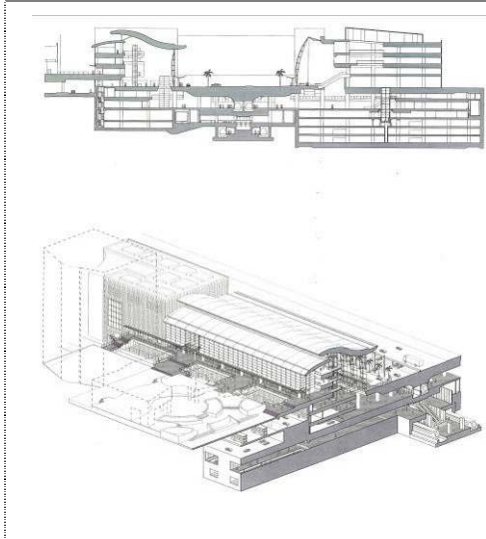


Figure 15. A section showing the elevated pedestrian deck of the IFC-Exchange Square complex.
Source: G. Pearce (ed.) Arup: Hong Kong Station, p.27.

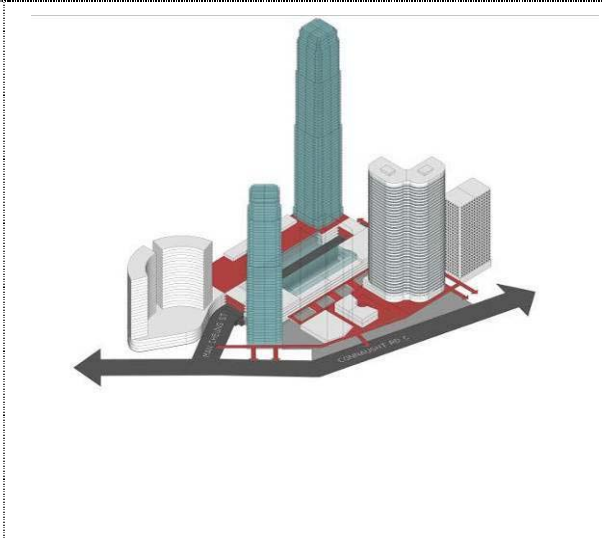


Figure 16. A diagram showing the pedestrian network of the IFC-Exchange Square complex (highlighted in red).

In 1998, the Airport Railway Hong Kong Station Development – One International Finance Centre (IFC) was completed. Moreover, the construction of Two International Finance Centre started in that year. The station complex features two concourses, respectively, for arrival and departure for the airport express line, and contains six levels of public circulation and diverse facilities from the elevated pedestrian terraces down to the lowest rail bed (plus two extra levels of retails and one public-accessible roof garden above the retail podium). A mezzanine above the airport express rail bed connects the arrival and departure platforms. The whole complex, annexed with the Exchange Square at the first floor, caters to one commuter line and one express train to the airport, a bus hub, and provides an automated conveyor system to connect to the Central Station. The pedestrian system on the first floor stretches to encompass a larger business area including Sheung Wan, Mid-levels, and Admiralty (Figs. 15, 16).

Large property owners, Sun Hung Kai, Hong Kong Land, and Cheung Kong jointly determined

the pattern of the elevated pedestrian network in Central, thus splitting the continuous street wall into those with or without attached skywalks. The integrated space provides great convenience for commuters, travelers, and consumers at different heights, but disturbs the continuity of street-level sidewalks. The giant volume of a few super block developments (Hong Kong Land complex and IFC) was broken down into manageable blocks (connected by footbridges, and underground or sky concourses) so that each section can be served by separate automobile entry ways, subway accesses (if possible), natural lighting and ventilation, and evenly allocated pedestrian accessibility. Unlike the Sha Tin town center, Central was not built according to a comprehensive master plan, but rather every piecemeal spatial adjustment contributed to related businesses with increasing pedestrian accessibility. The heavily manipulated pedestrian flow suppressed unwanted competition between neighboring businesses, reinforcing an unequal spatial and economic order (Figs. 17, 18).

Table 2. Privately-owned public passages and spaces within Hong Kong Station and Exchange Square

Hong Kong Station Development, Harbour View Street, Central (owned by MTR and Sun Hung Kai)	
Open Space	Its size is not less than 13,000 sq.m. and it is located at Podium Levels 1, 3 and 4.
Footbridges	They are accessible from the Podium of Exchange Square and the General Post Office.
Public Pedestrian Passage	It is located at ground level and Podium Level 1 of IFC Mall.
Footbridge Supports and Connections	One connects with the footbridge system to Central Piers; One connects with the footbridge system to Hang Seng Bank Headquarters; One connects with the footbridge system to Shun Tak Centre; To provide supports and connections to the footbridge between One International Finance Centre and Four Seasons Hotel; To connect to a footbridge over Man Po Street, which is not yet constructed; and To connect to a footbridge over Man Yiu Street, which is not yet constructed.

MTR Hong Kong Station and Ancillary Facilities and Station Carparks	It is accessible from Harbour View Street and Man Cheung Street.
Exchange Square, 8 Connaught Place (owned by Hong Kong Land)	
Public Pedestrian Passages	They are accessible from the footbridge along Connaught Road Central and the IFC Mall.
World Wide House, 19 Des Voeux Road Central (owned by Cheung Kong Group)	
Footbridge	It is accessible from Pedder Street.
Public Pedestrian Walkway	It is accessible from Pedder Street, Des Voeux Road Central and Connaught Road Central.
Public Pedestrian Passage	It is accessible from Des Voeux Road Central and two footbridges across Pedder Street.



Left: Figure 17. The pedestrian connections connecting the Exchange Square and Hong Kong Station (IFC Mall).

Right: Figure 18. The multi-level retail arcades inside the bridge connecting Phase I and Phase II of the IFC Mall.

Table 3. The comparison of basic information of two sites

	Sha Tin Town Center	IFC-Exchange Square Complex
Function	Activity center of Sha Tin New Town	Mass Transportation Interchange and CBD of Hong Kong
Completion year of different phases and attached pedestrian links	1981, Sha Tin Center 1983-1984, Sha Tin Plaza 1984, New Town Plaza Phase I,II 1986, Wai Wah Center	1972, Jardine House (with attached pedestrian bridges) 1988, Exchange Square 1999, IFC-HK Station Phase I 2003, IFC-HK Station Phase

	1988, Sha Tin Plaza 1990, New Town Plaza Phase III	II
Major private owners of the indoor pedestrian network	SHK as the prominent owner Henderson Land Development Cheung Kong Group Chinachem Group	Consortium of MTR and SHK Hong Kong Land
Associated Public Transportations	KCR(Metro), Bus Terminus	Metro, Airport Express Line, Ferry, Bus Terminus
Grade-separated programs	Street level and KCR/pedestrian Concourse /Residential deck or terrace garden	Metro/Street level/Pedestrian Concourse/Terrace garden
Ways of creating human scale spaces	Terrace garden, community amenities Stepping and separation of volumes Traversable spaces	Forum and civic furniture Roof garden Separation of volumes Traversable spaces
Planning process	Comprehensively planned as a whole	Accumulatively planned with piecemeal adjustment and
Vertical Ownership Separation/Consortium	No	Yes (IFC and MTR)
Target Space Users	Local residents Residents from other parts of HK Travelers from Chinese mainland	Office workers Travelers and commuters

5. Conclusions and Reflections

The multilevel pedestrian network in Hong Kong is a spatial manifestation of the market logic in the form of extreme conditions, with the government functioning as a mediator and promoter of the lands' appreciation. The vertical ordering of subways, mezzanines, streets, and pedestrian networks significantly increased the contact interface between the city and the consumer space, yet enhanced the entanglement between the public services (mass transit) and large private land owners. On the one hand, MTR, as a semi-state company, can develop or sell its air-rights. On the other hand, many community services were owned by land developers. For instance, the

Kowloon Motor Bus is owned by Sun Hung Kai; ParknShop (a chain grocery store) is owned by Cheung Kong. Hong Kong's spatial integration is closely related to this market concentration. The pedestrian network provides extremely efficient community services with its seamless integration with the mass transit, yet dominates people's mentality and experience of the city. When the frontage of the businesses is multiplied and enlarged with attached multilevel access points, so does the use value of every square foot of business floor space. The entire public service of Hong Kong is heavily reliant on land appreciation and land development. The high market land value is driven by an anticipation of ever-growing yields per square foot. In fact, the entire system of land finance turned to dispense with certain necessary social benefits and, simultaneously, deprived citizens of any significant political influence, as Cuthbert critiques in his essay.¹⁹³ The land finance industry typically viewed walkers as either potential clients or solely as passersby; loitering is not encouraged in such an environment. The spatial configuration of these pedestrian walkways sustained the high yields of these shopping centers and offices, yet broadened the gap between those who benefited from this production chain and those who did not.

In Hong Kong, both space owners and users intend to utilize a space to its full capacity; thus, they usually endowed them with multiple programs and purposes. The Hong Kong government's aspiration for achieving connectivity and mobility justified the pragmatic utilization of the space,

¹⁹³ Alexander Cuthbert, "Hong Kong 1997: the transition to socialism—ideology, discourse, and urban spatial structure," *Environment and Planning D, Society and Space*, vol 5 (1987), 123-150.

yet discouraged other social needs, such as leisure, and group and spontaneous cultural activities. The multilevel pedestrian zones were designed to be a rational spatial system for urban inhabitants. Space users are forced to take a fixed route leading to major businesses or attractions. The pedestrian system actually constituted an unspoken rule contingent on the good will of large businesses. However, because many of them are held and operated by private owners or public service companies, the pedestrian network of Hong Kong is usually kept in good condition and has become an integral part of the social life of Hong Kong. The existing urban studies on the “ambiguous space” of Hong Kong (Cuthbert) over-politicized this phenomenon and relegated its planning and management to a zero-sum game. Besides, Solomon’s call for more coordination between “top-down and bottom-up” planning practices is still elusive, because this conclusion does not specify what the coordination between “top-down and bottom-up” are in the Hong Kong planning discourse. What critically matters is not by whom these spaces are owned or operated, but how these spaces behaves in terms of the public good for Hong Kong people. The planning regulation and urban design criteria should more attend to the “incentives” (or new marginal utilities in terms of space) for both the large business owners and space users.

Hong Kong’s relatively successful model of pedestrian spaces provides a test case to examine the social and architectural conditions of a vertically configured city in terms of extreme density and intensity. There are still opportunities that Hong Kong’s planning regulations could function as a more performance-based, operative apparatus in which delightful urban spaces are promoted, instead of a mere set of descriptive rules. The established knowledge about spatial quality should be further translated into more enforceable and measurable planning standards. Due to Hong Kong citizens’ increasing demands for public participation and multi-purpose events, the existing administrative framework is unable to grapple with the public space as an integrated realm. The

disciplinary implication of the case of Hong Kong's elevated pedestrian network is that the entire architectural society should reassess its relationship with the market logic and the administrative environment in design practices, and show respect to these existing administrative and statutory terms. Lastly, more energy should be expended to explore the potentials of these administrative and economic terms as catalyst of urban forms. With that in mind, the architectural criticism about density and metropolitan culture should be established on the basis of a more comprehensive understanding of this market reality.

Chapter 5. Hong Kong Section in Consumer Space:

Vertical Shopping Centers

1. Introduction

This chapter explores an emerging form of vertical integration as part of Hong Kong's changing consumer space. In the 1980s, more and more original equipment manufacturers (OEMs) were relocating to the Pearl River Delta, mostly due to the opening up of China; as a result, Hong Kong began to consider itself as a service center for the entire Pearl River Delta, rather than an autonomous Crown Colony. The Sino-British Joint Declaration (1984) asserted Hong Kong's long run prosperity as an offshore financial center for China. Tourism was one of Hong Kong's mainstays for half a century after World War II. However, what attracted Western tourists in the 1950s, a cityscape featuring *ad hoc* developments and informal adaption, was dissipating in the 1980s. Radical urban restructuring and uniform building forms were destructive to the cultural features of Hong Kong and large-scale developments dominated the built environment of Hong Kong's waterfront and the new towns. Simultaneously, the release of *Metroplan* and *PADS (Port and Airport Development Strategy)* in the early 1990s radically changed the spatial structure of Hong Kong, with the introduction of new urban mobilities (new airport, metro lines, ports) and more intimate integration between consumerism and transport infrastructure. Increasingly being aware of its distinctive urban identity as a city of hyper-density, architectural practices in Hong Kong were increasingly concerned with the maintenance of the city's intrinsic qualities in stringent site conditions and building regulations, and sought to condense and represent these qualities in interior spaces.

As presented by preceding chapters, the shopping mall, as a late-capitalism phenomenon, exhibits an alternative reality of modernity (or postmodernity). The shopping mall is a spatial manifestation of capital accumulation and intensive communication. The Jerde Partnership, led by the retail and theme park designer Jon Jerde, launched its Hong Kong office in 1995, 10 years after the landmark Horton Plaza was built in downtown San Diego. Around the turn of the new century, the Jerde Partnership was actively involved in the “mallings” of almost all of the major cities of Asia-Pacific (e.g., Canal City, Hakata, 1996; Robina Town Center, Queensland, 1996; Super Brand Mall, Shanghai, 2002; Core Pacific City, Taipei, 2002; Roppongi Hills, Tokyo, 2003).¹⁹⁴ Jerde Partnership’s innovation about theme parks and shopping centers reinvigorates a half-century old American model established by Victor Gruen in the mid-20th Century.¹⁹⁵ Victor Gruen’s modernist “shopping town” rationalized shopping in a monolithic form, and restructured it as an independent urban function in a suburban environment. Conversely, Jerde Partnership’s innovative shopping model sought to bring this rationalized “shopping town” back to existing urban fabric and chaos. Always being identified as a representative architect of postmodern culture, Jerde Partnership’s work was always highlighted for its contribution to postmodern architectural language and place-making.¹⁹⁶ However, this chapter is rather concentrated on its

¹⁹⁴ Through this chapter, if not otherwise stated, the term “Jerde” refers to the Jerde Partnership as an integrated group of contributors for the intellectual and physical production discussed in this chapter.

¹⁹⁵ Victor Gruen, Larry Smith, *Shopping towns USA: The planning of shopping centers* (Reinhold, New York, 1960).

¹⁹⁶ Frances Anderton, ed., *You Are Here: The Jerde Partnership International* (London: Phaidon Press Limited, 1999).

agenda for new circulation patterns in the consumer spaces in East Asia, in which height, density, globalization, and arising consumerism coexist and influence the built-environment together.

In general, as an East Asian entrepot, Hong Kong is immersed in a consumer culture. The culture differs from that of a typical suburban environment of the United States. This unique form of consumer culture has two determinants. First, shopping centers of Hong Kong (and most other East Asian cities) are always situated in a hyper-dense environment which blends a combination of functions, including residential, industrial, commercial, cultural, and institutional uses. Second, due to severe space shortages, in many cases various businesses in a Hong Kong shopping center are obliged to blur business or property boundaries in actual operation (not necessarily in lease terms). As Stan Allen remarks in his discussion of the “mat configuration,” the sectional configuration of such spaces is “not the product of stacking, but of weaving, warping, folding, oozing, interlacing, and knotting together.”¹⁹⁷ Thus, such stringent conditions and multi-functionality cultivated an art of mixing different programs and shops. The ensuing sections will explain this culture of mixing in detail.

In Hong Kong, the significance of shopping centers’ social function is built on the fact that consumption played a crucial role in the modernization of Hong Kong during the MacLehose

¹⁹⁷ Stan Allen, “Mat Urbanism: The Thick-2d,” In *Le Corbusier's Venice Hospital and the Revival of Mat Building, Case #2*, edited by Hashim Sarkis (New York: Prestel, 2001), 125.

administration (1971-1982).¹⁹⁸ In modern consumer spaces (department stores, shopping centers), Hong Kong people were enabled to engage with fashions, idols, and lifestyles from the developed West, a sign of being “modern.” There was an urge towards synchronization for the visitors of the shopping center, a sense that everyone in the shopping center should adjust his or her mentality and behavior to be aligned with global trends.

The Asian Financial Crisis in 1998 and Hong Kong’s re-integration with Mainland China prompted the city to engage more deeply with the service economy. According to the 2013 census report, Hong Kong’s population growth is slower than expected in the new century. In fact, the population distribution across the entire territory has been relatively balanced ever since the postwar era. Presently, about a half of the Hong Kong population live in recently built suburban housing estates in the New Territories; thus, more citizens go to those one-stop shopping centers for a variety of amenities and services (despite the fact that the “suburban” estates can be extremely dense, compared to American standards). However, thousands of tourists, especially same-day and overnight travelers, streamed into Hong Kong thanks to the “Individual Visit Scheme” starting from 2003. In 2013, more than 40 million Mainland tourists

¹⁹⁸ See Tai-lok Lui, “The Malling of Hong Kong,” in *Consuming Hong Kong*, ed. Gordon Mathews & Tai-lok Lui (Hong Kong: Hong Kong University Press, 2001), pp. 23-45. The terms of “community,” “communal scene” and “communality” were highlighted in Jerde Partnership’s monographs and in different interviews and project summaries. The “public life” in malls was discussed in great depth in Margaret Crawford’s article on shopping malls. See Margaret Crawford, “The World in a Shopping Mall,” in *Variations on a Theme Park*, ed. Michael Sorkin (New York: The Noonday Press, 1992), pp. 3-30. The term “public space” has been over-charged with political tension in critiques of the promenading of urban space. Instead, this article seeks to outlay the terminologies about the social and communal life in retail spaces based on Jerde’s own way of wording.

entered Hong Kong for a same-day or overnight stay¹⁹⁹. The foremost purpose of these travels is shopping. Coupled with the mounting demographic pressure incurred by people pulling rolling suitcases, there is an immersive mentality of transition, contradiction, and tension. In a city which is involved in a ceaseless cycle of demolition and reconstruction, many public housing estates built in the 1950s and 1960s have been razed to give way to new residential towers with more floor space and higher building standards. Such ceaseless transition constitutes an experience similar to Simmel and Benjamin's observation of Paris and Berlin in the early 20th Century, with even more intensity and sharper discontinuity.²⁰⁰ It is also reminiscent of Jon Jerde's remark on the rapid mall boom of the American city in the late 20th Century. Jon Jerde argues: "the essential challenge is to conflate centuries of collective endeavor.....into the time frame of a decade or less."²⁰¹ Moreover, the tightness of the timeframe exacerbates the hunger for common space in this Asian city (Fig. 1).

¹⁹⁹ Data released by the Tourism Commission, Hong Kong.

²⁰⁰ See Georg Simmel, "Metropolis and Mental Life (1903)," in *The Blackwell Cityreader*, edited by Gary Bridge and Sophie Watson (Oxford and Malden, MA: Wiley-Blackwell, 2002); Walter Benjamin, *The Arcades Project*, Trans. Howard Eiland and Kevin McLaughli (Cambridge, MA and London: The Belknap Press of Harvard University Press, 1999); David Frisby, *Cityscapes of Modernity: Critical Explorations* (Cambridge: Polity, 2001), Introduction.

²⁰¹ See Jerde Partnership, *The Jerde Partnership International – Visceral Reality*. Milan: l'Arca Edizioni, 1998, 8.

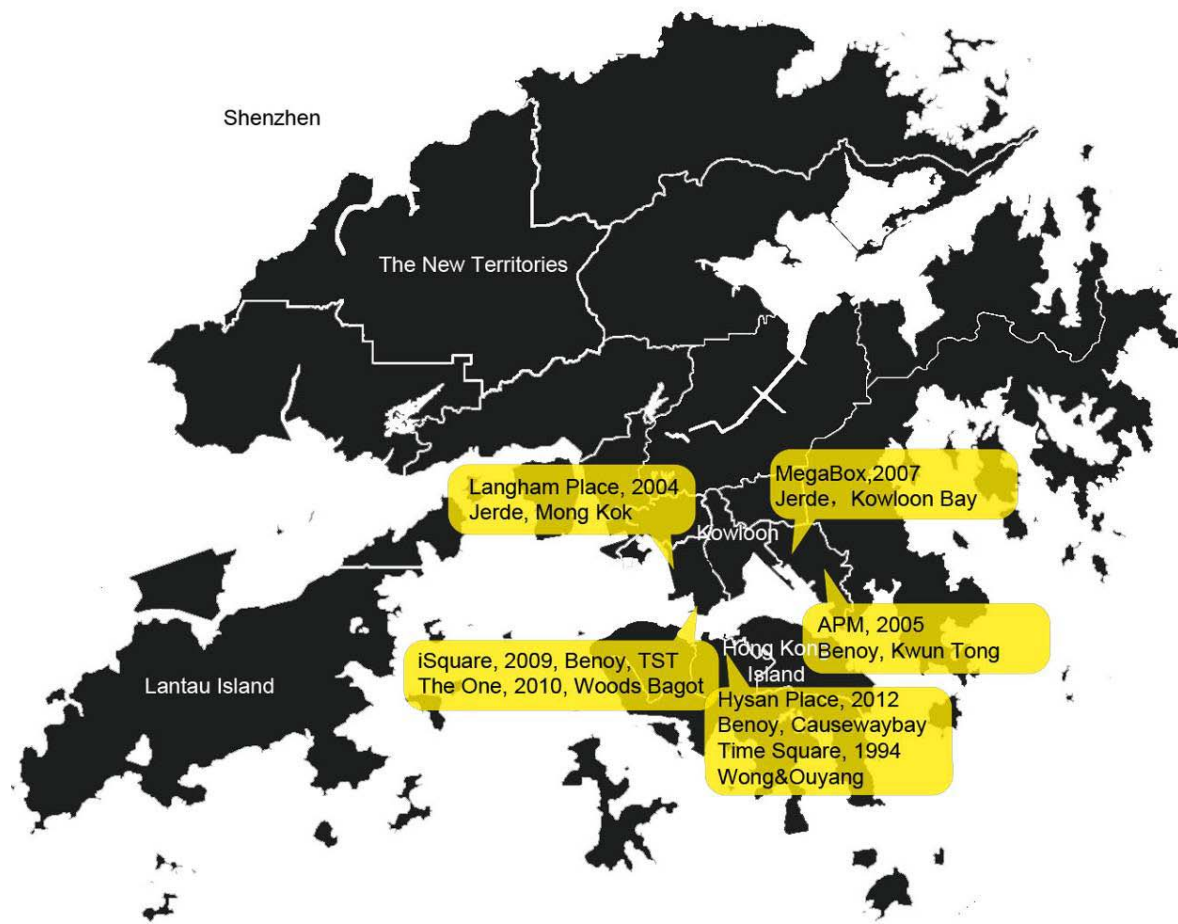


Figure 1. A map showing Hong Kong vertical shopping centers (shopping acades more than 10-stories high).

The ensuing discussion of this chapter will be built around Jerde Partnership's projects in Hong Kong, in particular, Langham Place in Mong Kok and MegaBox in Kowloon Bay. Although other architectural firms, such as Benoy and Aedas, are more economically successful than Jerde Partnership in the market of Hong Kong, it is fair to claim that the two projects introduced a new interior urbanism to the city. As previously mentioned, the modern shopping center, along with its predecessors in the 19th Century arcades, in the department stores, and in the American regional malls, is a manifestation of displayed commodities. It exhibits an experience of what

Benjamin refers to as a “panorama.” It is noteworthy that the “panorama” differs from the “snapshot,” just as the narrative differs from the image.²⁰² The shopping center, as a “panorama,” is both synchronic (as a collective display of the masses and commodities) and diachronic (as a narrative for individual movement in space). The irreconcilable conflict between the steady image of commodities and as a scripted narrative was intensified in Hong Kong’s hyper-density. In the context of Hong Kong, what might complicate the internal paradox of the consumer space (or the panorama) even more is the magnified vertical dimension. These vertical shopping centers of Hong Kong with 10 stories or more have adopted a distinctive way of circulation, and this circulatory pattern is reshaping the relationship between the space-users and the space. Such a new experience can greatly illuminate the existing literature about East Asian modernity. Hence, the rest of the chapter investigates the opportunities and challenges in a form of consumerism which apparently differs from Victor Gruen’s dumbbell layout in the 1950s. Jerde’s practice in Hong Kong is an attempt to define a new frontier of the “mall” of East Asia. By contextualizing Jerde’s practice in Hong Kong in both consumerism and urbanism, this discussion can also inform the Asian urban study, which suffers from an insufficiency of apparatuses and terminologies (Fig. 1).

2. Modernity and Hong Kong Consumerism

In the 1970s, the completion of the Ocean Terminal, developed by the “Hong Kong and

²⁰² David Frisby, *Cityscapes of Modernity: Critical Explorations*, Introduction.

Kowloon Wharf and Godown Company,” marked the commencement of a consumer age in Hong Kong. Remodeled from a wharf pier, the Ocean Terminal was the largest shopping center at that time. The Ocean Terminal sparked the “mallng” of Hong Kong and set up a living standard for the rest of the city.²⁰³ The civil war (1946-1949), the Great Famine (1958-1962), and the Cultural Revolution (1966-1976) drove continuous streams of immigrants from China to Hong Kong in the 1950s and 1960s. Until the early 1970s, Hong Kong remained as an immigrant city with no common memory. Thus, the “mallng” process of Hong Kong, unlike the “mallng” of American cities, was not an immediate outcome of growing affluence and deindustrialization. It was a part of systemic self-identification seeking commonality and communality (Figs. 2, 3).

For the entire 1970s, Governor Murry MacLehose implemented his benign colonialism by building a welfare city-state. The colonial government cleared out slums, paddy fields and tenement buildings (tong lau), in order to give way to a brand-new, affluent population with no painful memory of famines and social turmoil. Shopping centers, with their striking volumes and glossy appearance, starkly contrasted with shabby market streets selling only necessities. The Ocean Terminal and its extension in Tsim Sha Tsui (Kowloon) defined an enclave for tourists from overseas, mostly Americans and Europeans. These spaces and associated cultural features showcased a model lifestyle both for the foreigners and the locals, and guided the locals to foster a modern civil society. Hong Kong sociologist Tai-lok Lui used the term “conspicuous shopping” to describe the behavior of shoppers which showed the world around them their high

²⁰³ Tai-lok Lui, ‘The Mallng of Hong Kong.’

economic status.²⁰⁴ Sons and daughters of postwar Mainland immigrants were insatiably pursuing self-expression in the Ocean Terminal. To Lui, the young generation of Hong Kong, by hanging out to establish social networks, taking part in political debates and chatting about foreign brand-name products, could identify a new lifestyle in a way that was different from their parents.

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. These superblock developments were usually built on top of metro stations and bus terminus, indicating an integrated urban landscape reminiscent of Colin Buchanan's imagination of the "traffic architecture." In terms of operation, these retail facilities were organized by sorted product types with blurred brand differences (with consignment shops).²⁰⁵ However, like the Ocean Terminal, they are reminiscent of multi-story warehouses and cannot be considered as a structure of "panorama" (Benjamin) in interior design. There is a missing narrative which can combine the stacked commodities together in one movement. Meanwhile, shop-front design was rarely known to the store operators at that time, and retail spaces were usually leased to tenants through the way of consignment counters.²⁰⁶ In the 1990s, to satisfy the diversifying tastes of shoppers,

²⁰⁴ Ibid.

²⁰⁵ See "An efficient, effective shopping environment," *Building Journal Hongkong*, December 1984.

²⁰⁶ See Joe Lin, "40 years of retail change but Hong Kong remains a shopper's paradise," *South China Morning Post*, Tuesday, 04 September, 2012.

the American retail model of individually-branded shops with single consignment counters ushered in the concept of the one-stop shopping center.

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, featured the first vertical mall of Hong Kong with a 14-story retail podium. The sky lobby system was then borrowed from office buildings to be implemented in shopping centers. The iSQUARE, a record 31-story complex has recently been added to the list of must-see attractions in Hong Kong. Basically iSquare is sitting on a lot which is too limited for a traditional shopping mall. Designed by the consortium of Benoy and Rocco Design, this commercial complex is designed according to a concept dubbed “stacked boxes.” The first eight levels of this are retail space, while the remaining floors in the tower have been set aside for other commercial services. 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, penetrating vertically categorized zones. What is typical of many vertical shopping centers is that the express escalators are integrated with the exterior curtain wall facing the major streets. Thus, the internal circulation, in the vertical dimension, has become an esthetic element. The same technology is adopted in another Benoy project, the recently built Hysan Place at Causeway Bay. These emergent consumer spaces are disguised as monolithic structures with each program seemingly belonging to a conjured whole. It marks the appearance of a new leisure machine in a city still seeking a common mentality.

Starting from the 1990s, the consumer space of Hong Kong began to tightly engage in the postmodern urban culture of the West. This cultural turn coincided with a trend in which more

and more multinational architectural firms were commissioned with major architectural projects in Hong Kong.²⁰⁷ Jerde Partnership's involvement in Hong Kong's urban re-imagining is not a coincidence. Jerde's spatial formula captured the new impulse of Hong Kong after 1997. Since the late 1990s, Hong Kong has shrugged off the burdens of traditional light industry and original equipment manufacturing. Around the turn of the new century, Hong Kong launched a battle against a sluggish local economy, an aftermath of the 1997 Asian Financial Crisis and the outbreak of SARS (Severe Acute Respiratory Syndrome).²⁰⁸ The relaxation of travel policy for mainland travelers completely changed the retail climate of Hong Kong. Mainlanders' insatiable appetite for international brand-name products could only be satisfied in this low profit tax city. Thus, with the inflow of mainlander tourists, there emerged a new consumerism which more closely wove sightseeing with retailing in one location. Such a new consumerism concluded a half-century of evolution of shopping centers in Hong Kong, commenced by the opening of the Ocean Terminal at Tsim Sha Tsui in 1966 (Figs. 4, 5).

²⁰⁷ Architectural firms based in Hong Kong and Southeast Asia, such as Palmer & Turner, cannot be considered to be international firms, although they usually have a body of staff with international backgrounds. Australian landscape architects began to establish local Hong Kong offices in the late 1970s, and became active in Hong Kong's large urban projects. Norman Foster (HSBC Bank, 1986) and I. M. Pei (Bank of China, 1990) are amongst the first group of "starchitects" who practiced in Hong Kong.

²⁰⁸ Jerde's third built project in Hong Kong, the Arcade at Cyberport, presents a different character, and its scale and typology are not comparable to the two "vertical shopping centers" in Mong Kok and Kowloon Bay.



Figure 2. A model of the Ocean Terminal’s original scheme, Hong Kong.
Source: Far East Architect and Builder, January 1965.



Figure 3. Ocean Terminal today.
Source: <http://www.worldpropertychannel.com>.



Figure 4. Interior express escalator in the “iSquare” shopping center.



Figure 5. Interior space of the Times Square shopping center.

3. Internal Paradox in the Vertical Shopping Centers

The preceding discussion has presented a cluster of concepts initiated and developed by Georg Simmel, Walter Benjamin and Rem Koolhaas on the interiorized, stage-like urban spaces, including arcades, trade exhibition, panoramas, theme parks, department stores, malls, and the Downtown Athletic Club. The latest variation of the arcades is the “Junkspace.” For Koolhaas, the “Junkspace” “deploys the infrastructure of seamlessness,” and “is always interior” and “so

extensive that you rarely perceive limits.”²⁰⁹ The infrastructure of seamlessness is composed of “people movers,” escalators, and elevators in John Portman’s grand atriums. Global consumerism has built up such an inescapable interior that it has overshadowed all of the previous variations of the arcades. In “Future City,” Fredric Jameson asserts the formlessness of Rem Koolhaas’ “Junkspace” and the end of architecture in globalization and immersive consumerism. Jameson foresees a moment in which “shopping” will “shortly become not merely a political but also a metaphysical issue.” In another of his articles, “Westin Bonaventure Hotel,” Jameson considers the Bonaventure Hotel in Los Angeles to be “total space, a complete world, a kind of miniature city.”²¹⁰ Simultaneously, Jameson observes that “recent architectural theory has begun to borrow from narrative analysis in other fields and to see our physical trajectories through such buildings (mall, hotel) as virtual narratives or stories, as dynamic paths and narrative paradigms which we as visitors are asked to fulfill and to complete with our own bodies and movements.” Thus, the Westin Bonaventure Hotel is a machine not to “represent motion,” but to be “represented in motion.” Ultimately, people are caught in a “multinational and de-centered communicational network.”²¹¹ (Fig. 19).

²⁰⁹ Rem Koolhaas, “Junkspace,” Chuihua Judy Chung, Jeffrey Inaba et al, eds. *Harvard School of Design Guide to Shopping* (Köln: Taschen, 2002).

²¹⁰ Fredric Jameson, “The Westin Bonaventure Hotel,” in *The Postmodern Presence: Readings on Postmodernism in American Culture and Society*, edited by Arthur Asa Berger (Walnut Creek, CA: AltaMira Press, 1998).

²¹¹ Ibid. Jameson writes: “So I come finally to my principal point here, that this latest mutation in space – postmodern hyperspace – has finally succeeded in transcending the capacities of the individual human body to locate itself, to organize its immediate surroundings perceptually, and cognitively to map its position in a mappable external world. It may now be suggested that this alarming disjunction point between the body and

The boundless encroachment of the sky, by ever-growing skyscrapers, characterizes what Richard Sennett defines as a vertical “neutral city.” The neutral city is an inescapable interior in which the individual is submerged, comprising an endless matrix of synchronic things (commodities), as a typical cityscape of capitalism. For Sennett, order was something lost in the expansion of neutral “city grids” in capitalist metropolises.²¹² The cage-like skyscrapers effaced all value differences and created a city without alternatives. The neutral grids which New York apartment towers created also dismissed diversity, social relationships, and family values. In light of this view, the vertical shopping center is in fact a stacked warehouse for services and goods, a neutral array of things. However, simultaneously, it should create a virtual narrative for visitors to “fulfill with their own bodies and movement” (in Jameson’s term). The conflict between the stacked image and the narrative in motion is an internal paradox of the vertical shopping center.

its built-environment – which is to the initial bewilderment of the older modernism as the velocities of spacecraft to those the automobile – can itself stand as the symbol and analogon of that even sharper dilemma which is the incapacity of our minds, at least at present, to map the great global multinational and decentered communicational network in which we find ourselves caught as individual subjects.”

²¹² See Richard Sennett, *The Conscience of the Eye: The Design and Social Life of Cities* (London & Boston: Faber and Faber, 1990), 41-68.

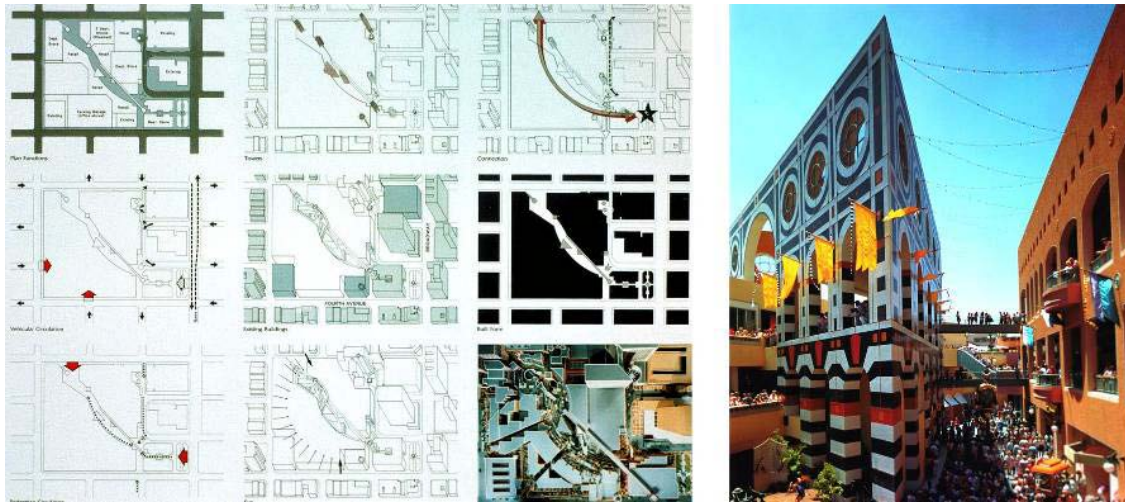


Figure 6. Left: Spatial diagram of Horton Plaza by Jerde; Right: the volumetric “Diagonal Arc” of Horton Plaza.

Source: Jerde Partnership.

Compared to other vertical cities, such as New York and Chicago, Hong Kong’s mountainous topography and extreme density nourished a unique urbanity rarely seen in other parts of the world. The internal paradox of the arcades or panorama, which prevents consumer spaces from growing higher in the West, has been largely relieved in Hong Kong. The networked pedestrian precincts, elongated escalators, and vertically-separated and interwoven traffic flows have created a library for a “Culture of Congestion” which contests traditional ways of master planning. Hong Kong architects have been very successful in exercising an art of sharing in various sites. The actualization of this art of sharing is built on a set of technologies and administrative exercises, including consignment shops, one-way circulation, privately owned public spaces and a mixed program of different businesses, as well as the design tactics associated with these technologies. However, in most situations, such approaches were adopted as *ad hoc* measures to circulate, relieve congestion, and channel pedestrian flow to privileged businesses. With more introverted networks centered on activity centers around metro stations,

ferry terminals and the airport, the city has become imbued with countless self-contained mixed-use commercial complexes as miniature cities.²¹³ Ironically, many commercial complexes are labelled with such terms as “square,” “plaza,” “village,” and “place.” These terms suggest an association with the global culture by alluding to places in the West, such as “Telford Garden,” “Westwood Mall,” and “Times Square.” However, these places with a name of “garden” have no real gardens, but barely interior shopping arcades. These approaches blur the time and space discontinuity within the global geography, and constitute an illusion in which everyone in the consumer space is synchronized with the heartbeat of the latest global fashion. This illusion of synchronization is materialized into the circulation pattern of the vertical shopping centers.

4. Langham Place

The project of Langham Place seeks to serve a multifaceted community with diverse interest foci. Its completion catalyzed 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

²¹³ For the integration of high density ‘estates’ and mass transit railway, see Charlie Q. L. Xue, Luming Ma and Ka Chuen Hui, “Indoor ‘Public’ Space – a study of atrium in MTR complexes of Hong Kong,” *Urban Design International* (London: Palgrave-MacMillan), Vol.17, No.2, (2012), 87-105; Charlie Q. L. Xue, Hailin Zhai and Joshua Roberts, “An urban island floating on the MTR station: a case study of the West Kowloon development in Hong Kong,” *Urban Design International* (London: Palgrave-MacMillan), Vol.15, No.4, (2010), 191-207.

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.²¹⁴ 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 a consumption machine (Fig. 7).

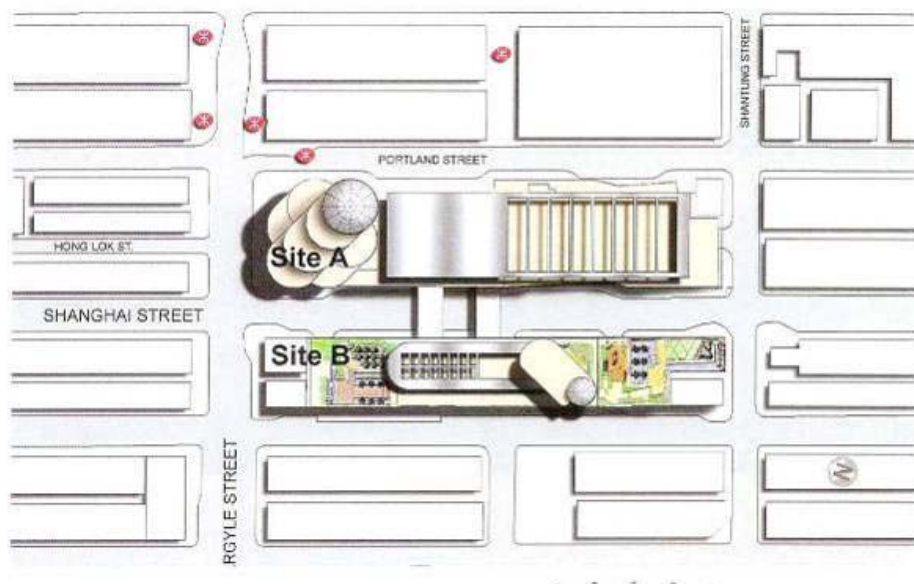


Figure 7. Master plan of Langham Place at Mong Kok . Source: Jerde Partnership).

²¹⁴ See Urban Renewal Authority, “Annual Report 2005,” Hong Kong: Urban Renewal Authority, 29.

In 1998, with the lifted height restrictions in Kowloon upon the removal of the Kai Tak Airport, a new scheme to revitalize the rundown West Mong Kok was initiated, which later became the project, Langham Place. 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 4-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 resolve a complex building program. “Virgin site” or artificial levels, as Rem Koolhaas mentioned in his “1909 theorem,” are entrenched themes in Jerde’s vertical malls in Hong Kong.²¹⁵ The “1909 theorem” creates a structure composed of independent plots with uniform spatial distribution, and this anonymity characterizes conventional department stores in Hong Kong. Jerde’s work and projects exhibit a quality different from Koolhaas’ “1909 theorem,” and broke the architectural purity and rationality of the traditional mall model initiated by Victor Gruen. The flaw of Gruen’s

²¹⁵ The “1909 theorem” was conceptualized by Koolhaas as “Skyscraper as utopian device for the production of unlimited numbers of virgin sites on a single metropolitan location,” see Rem Koolhaas, *Delirious New York*, p.83.

modernist shopping mall is that the typical horizontal layout cannot distribute commercial values evenly on upper floors in a vertical structure. Jerde developed a new spatial pattern to allow people access to higher floors. Jerde created three distinct “virgin sites” at different levels —“Grand Atrium” at Level 4, “Spiral Atrium” at Level 8, and the “Sky Garden” at Level 12.²¹⁶ The classical “diagonal arc,” a concept introduced by Jon Jerde in his Horton Plaza, is converted into continuous ramping arcades stretching from the north corner of Level 4 to the south corner of Level 12. Each atrium is served by its internal floor-to-floor circulation 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 different groups of visitors. These indoor open spaces, flooded with skylights, are exposed to the outside urban activity through large curtain walls. The openness of each atrium facilitates “way-finding” and “self-locating” for visitors in this enormous “panorama” (Figs. 8, 9, 10).

²¹⁶ The ordering of level numbers in this article complies with the U.S. system. The ground floor is marked as Level 1 or the first floor.



Figure 8. The “Grand Atrium” of Langham Place. Source: Jerde Partnership.



Figure 9. The “Spiral Atrium” of Langham Place.

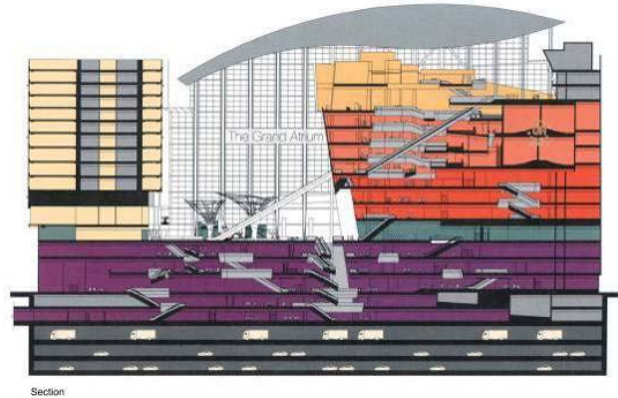


Figure 10. Section of the Langham Place shopping center, Source: Jerde Partnership.

The “Grand Atrium” at Level 4 was the outcome of an adaptive innovation, which was circumscribed by a series of administrative regulations and economic concerns, before the Jerde Partnership was commissioned as the design architect. Hong Kong building regulations 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 negotiation, the Level 4 deck would have been an outdoor rooftop. Such an incentive 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 canvas, reminiscent of the “Celestial Vault” in Jerde’s Fremont Street Experience in Las Vegas. The 60 meter tall grand atrium also functions as a public lobby, leading visitors to the hotel and other welfare 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. As cold air is heavier than warm air, the air-conditioning system was delicately designed to only cool the lower 10 meters of the Grand Atrium and the express escalator.

Langham Place contains more than 300 tenants, and many stores are boutiques under 50 square meters. Such a mix might cause extra secondary circulation area and narrower store frontage if the internal circulation is not properly laid out. Instead, the spiraling path from Level 8 to Level 12 merges the floor-to-floor stairs and the shopping arcades, an approach greatly reducing 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 3-story podium under the "Grand Atrium." Sportswear and lifestyle stores occupy Level 4 to Level 7. Most boutiques cluster around the Spiral Atrium at Level 8 to 11. In a way, Jerde reversed the order of servant and served spaces by converting the circulation into a stage filled with interactions of visitors.

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 visitors are immersed in a theatrical and memorable space, as if everyone is mentally involved in one single event. The stage effect is enhanced by a sense of sharing when people engage in one continuous movement. People might experience a similar effect when riding on a roller coaster tour in a theme park. In contrast to his American projects, such as the Universal City Walk in Hollywood, Jerde employs a cultureless, iconographical language for a Hong Kong audience. Artificial

landscape elements, rock finishes, comic signage, and deformed balconies are both functional elements and communicational messages. Starting from Horton Plaza, Jerde has created a reservoir of formal elements, a “kit of parts” system ready for assembly and reassembly.²¹⁷ As a typical manufacturing method of post-Fordism industry, the “kits of parts” system applies an adaptive formulaic building language which can be enjoyed and identified with by people of different cultures (Fig. 11).

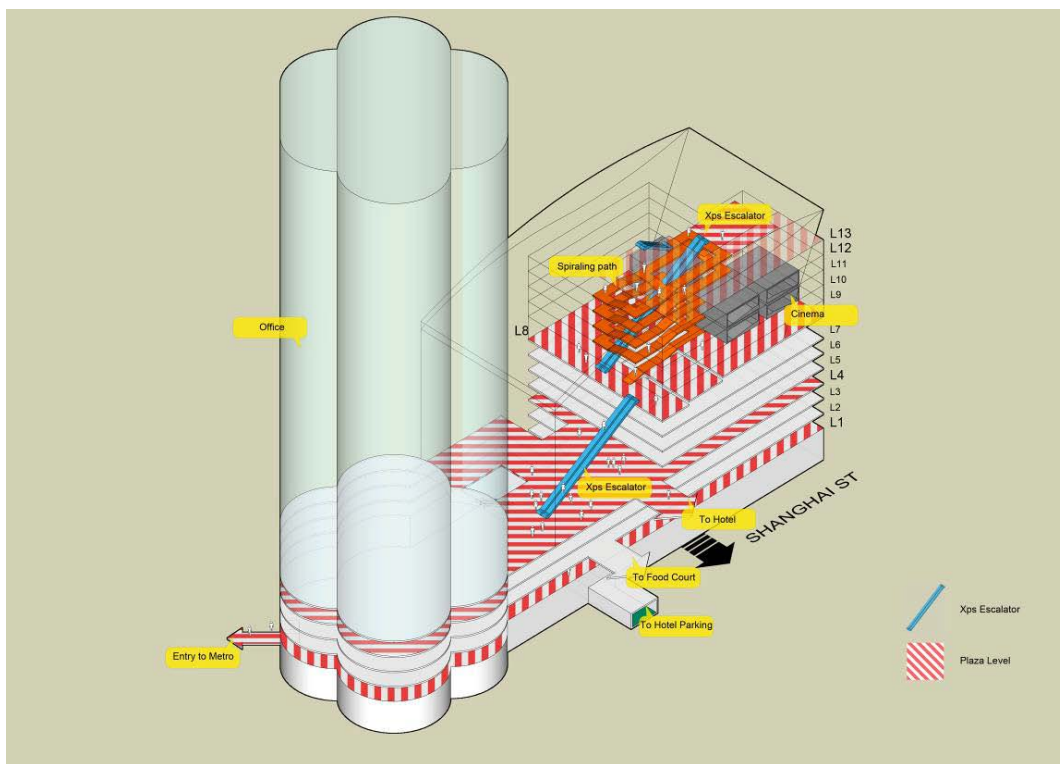


Figure 11. Digram showing the internal space of Langham Place.

²¹⁷ Jerde Partnership’s internal working paper.

5. MegaBox

MegaBox sits in Kowloon Bay, a post-industrial brown field with countless warehouses and industrial buildings. Kowloon Bay adjoins the old Kai Tak Airport, which has been recently converted into a cruise terminal according to the design of 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 to be 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 (Telford Garden is the air-right 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 at 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 indispensably a prominent element in the scheme of MegaBox. MegaBox overthrows the image of a city primarily driven by public transit. It exhibits the way in which changing lifestyles can be satisfied by reassembling the elements of an American strip mall of big box outlets, with innovative interior zoning and circulation design (Fig. 12).



Figure 12. Aerial of the MegaBox, Source: Jerde Partnership.

At first glance, MegaBox possesses few aspects that would qualify it as a regional activity center like Langham Place, for the project is situated in a site of poor accessibility and connectivity. A footbridge system to connect the site to the existing Kowloon Bay Station was proposed by the government and 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. The project stands in an urban context more reliant on auto traffic and industrial activities. It is located on a 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, the 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 a self-contained venue with enhanced internal circulation and zoning. 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.²¹⁸

The whole Enterprise Square 5 complex has a total gross floor area of 1.6 million square feet. As the flagship of Kerry Properties, MegaBox, the 19-story tube podium of the 34-story complex, houses 111,000 square meter 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 circulations, 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 were more than 1,000 square meters. Large anchor stores, such as B&Q (replaced by IKEA in 2009), Suning and AEON, were packaged into a sandwiched spatial pattern. Langham Place aims to be a center for fledgling youth culture in Mong Kok; whereas, the target visitors of MegaBox are middle class couples with kids, who are more likely to travel by car. These middle class couples are not interested in fashion shopping, but rather in home improvements, educational services, and family-friendly amusement programs. This target market differs from those of traditional commercial centers, such as Central, Tsim Sha Tsui, and Mong Kok.

Jon Jerde believes that good communal spaces do not naturally occur. Instead, they are a product

²¹⁸ See T. Metcalfe, T. “MegaBox Set to Become a Mega Hit,” *South China Morning Post*, August 3, 2007, and F. Wong, F. “A Heaven for Rent Refugees,” *South China Morning Post*, May 3, 2006.

of intentional “designable event.”²¹⁹ In other words, communality springs from carefully designed chemistry of architectural syntax and vocabularies. “Armature” is the key syntax for organizing the independent spatial elements of a shopping center. In Jerde’s terms, the “armatures” are “informing pieces that change and are changed by their surrounding conditions.”²²⁰ “Armatures” are not only functional, but communicational, as well. In the case of MegaBox, the “armature” is a necklace of vertical streets and arcades whose forms sprang from Horton Plaza’s diagonal arcs. The diagonal arcs of Horton Plaza created a continuous movement connecting a variety of visual stimuli. Thus, MegaBox incorporated this experience into a vertical structure. Like Lanham Place, the circulation pattern of MegaBox is a series of stacked and folded diagonal arcs, connected by a few atriums. In doing so, the continuous motion stringed by express escalators is converted into a signifier of movement, although this movement is completely mechanical based on “people movers” (in Portman’s term). The “armature” of MegaBox connects a few atriums: the arrival court, the ball atrium, and the grand ice rink. It is worth noting that these atriums are both for gathering and for specific activities, such as the grand ice rink. The interpenetration between circulation and leasable functions present Hong Kong’s art of sharing, in which various programs for dining, sports, amusement, and retailing can share a common space and entertain each other. This interpenetration created an intensified vision engine, which engages the shoppers in an endless circulation cycle across vertically

²¹⁹ Ann Bergren, “Jon Jerde and the Architecture of Pleasure.” *Assemblage*, Vol 37, pp.8-35.

²²⁰ “Armature” is the key element of Jerde’s design philosophy and has been repetitively implemented in many projects. See Jerde Partnership, *The Jerde Partnership International – Visceral Reality* (Milan: l’Arca Edizioni, 1998). P.8

stacked retail zones (Fig. 13).

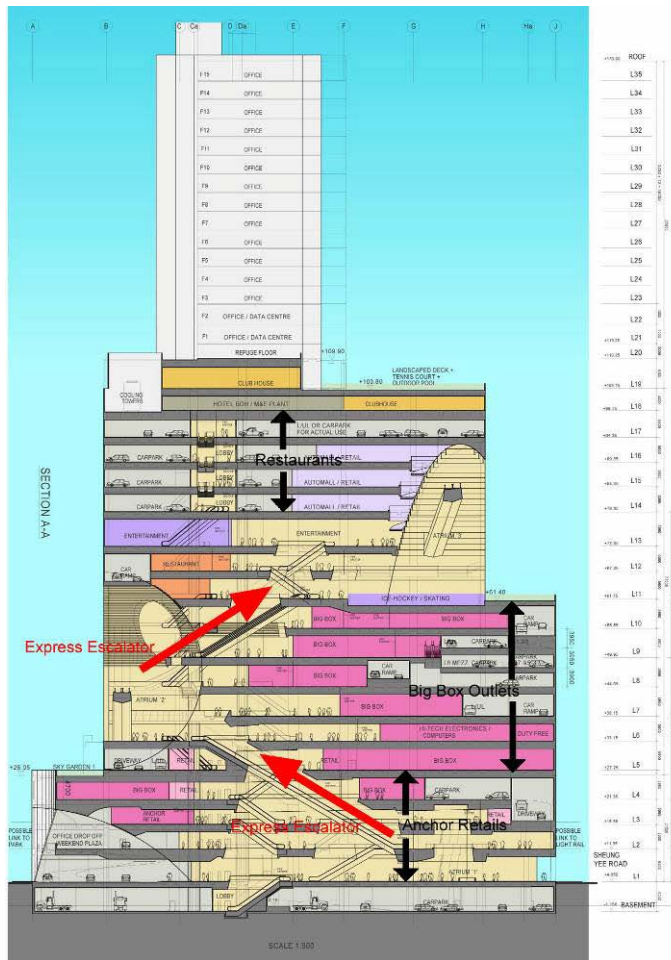


Figure 13. Section of the MegaBox. Author’s markings showing the “zones” and express escalators.
Source: Jerde Partnership.

The architectural syntax and language in MegaBox also reflects Jerde’s view of business operation and administration. 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 shoppers’ traffic can be facilitated by express escalators and elevators to

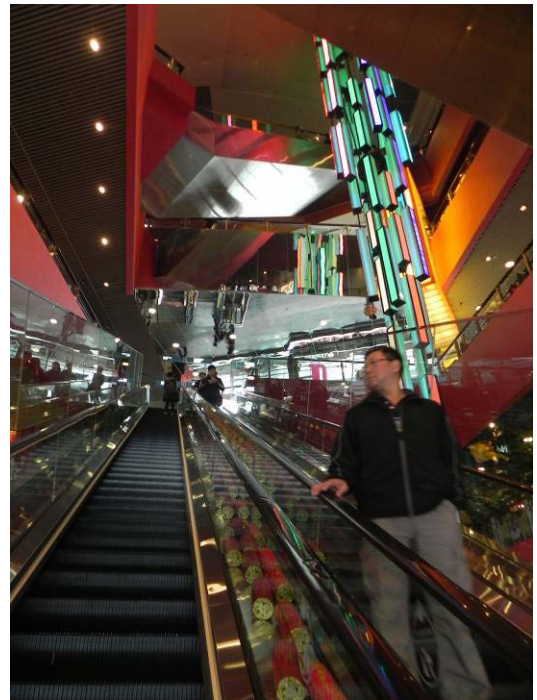
connect the mall's four major zones; second, the spiraling driveway reaches all floors and creates multiple access points at different levels, including the top floors; and third, the express escalators act as vertical diagonal arcs which expose the two giant atriums to the public, both incorporating a six-story glass curtain wall allowing natural light to penetrate into the building and offering scenic vistas across the Victorian Bay to shoppers.²²¹ The express escalators turned the two giant atriums (the ball atrium and the "Beehive" ice rink) from cul-de-sacs to connecting joints, which can be accessed by pedestrian traffic from two directions. Meanwhile, the vertical circulation created a new perspective of store frontage which cannot be viewed without riding on express escalators.

Due to the relatively low land cost compared to downtown areas, the developer Kerry Properties did not want to allocate costly resources to dig down or build more than one level of underground parking.²²² Instead, parking spaces were provided at higher floors, connected by a spiraling car ramp from the ground floor to Level 17. In this sense, one might find that the typical layout of the American strip mall has been transformed into a double helix circulation structure catering to the vertically stacked shopping zones. In contrast to its American counterpart, MegaBox is not simply the vertical variation of a strip mall with big box stores. Jerde's playful spatial language turned verticality into an opportunity for elongating the stay of visitors in the mechanical "people movers." The incessant ride on the escalators and lifts in the

²²¹ Building Journal, "Enterprise Square 5—MegaBox," Building Journal (Hong Kong), July 2007, pp.14-25.

²²² According to the correspondence between the author and Jerde's Vice President and Robert Choeff.

major atrium space synchronizes the movement of visitors with a consistent and motorized rhythm. For example, a rider on an escalator can experience this consistent rhythm by observing riders on other escalators. The express escalator in the ball atrium at Level 6 brings visitors from Level 6 to Level 9, and imposes an adventurous effect by forcing the visitors to move against the glass wall of a giant opening with a 26-meter diameter. With a circulation pattern reflecting the changing lifestyle of the Hong Kong middle class, MegaBox presents a distinctive image of density, and this gesture ensures that East Kowloon is not a duplication of Central²²³ (Figs.14, 15, 16).



²²³ See Doug Meigs, "New Central Rises in East Kowloon," China Daily, November 10, 2011.

Figure 12. Ball atrium of MegaBox.

Figure 13. Express escalator of MegaBox.

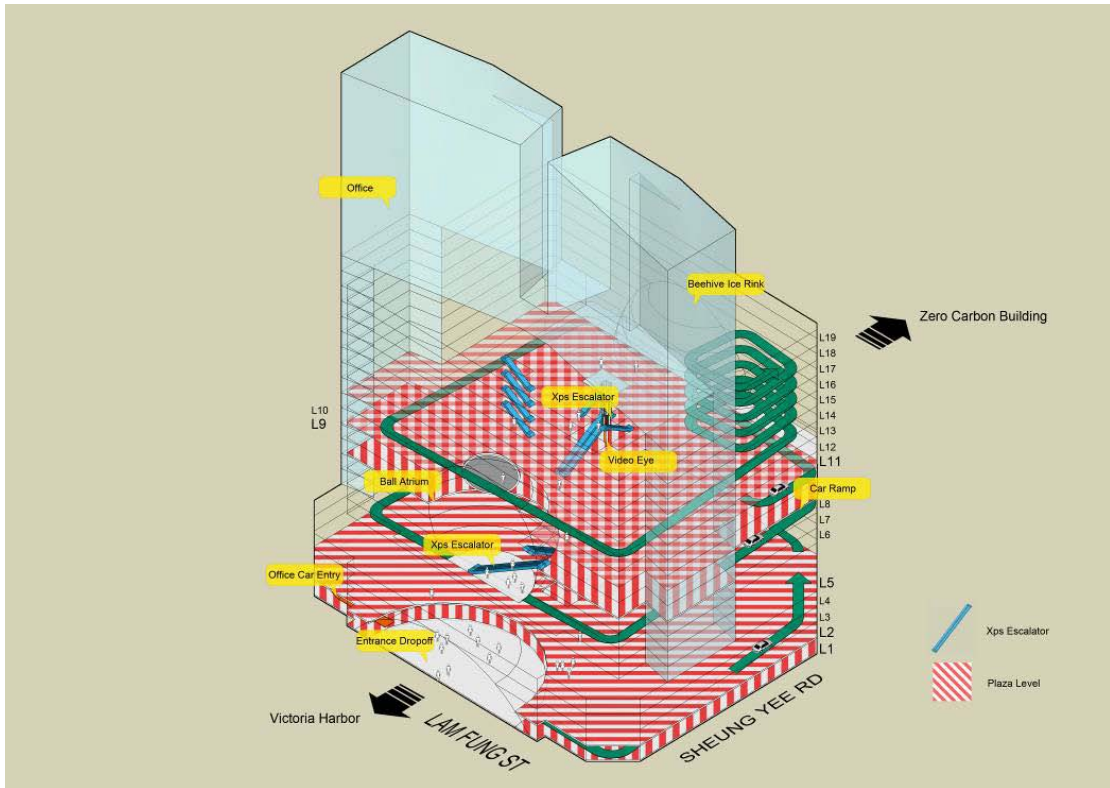


Figure 14. Author's spatial diagram of the MegaBox .

In the MegaBox, visitors' motion of ascending and descending revolves around visual attractions: express escalators, embedded electronic screens, artificial landscape, or showcases and light boxes between fascias. For instance, above the "Beehive" ice rink, a 10-meter long "Eye Video," a necklace of electronic bulletin boards, is centered on the circulation core of the food and beverage area, imposing a landscape of digital social networking. The multimedia components, embedded in these physical spaces, created an ambient iconographic interface between the visitors and the physical space. This immersive softens the hardness and uniformity of continuous store frontage. In reaction to the emergent digital media and a networked society, MegaBox displays its passionate attitude towards the integration of the virtual and the physical (Fig. 17).



Figure 17. “Eye Video” in the MegaBox as social media. The screens are bulletins showing visitors’ wishes to their family members and friends.

Source: Jerde Partnership.

JOHN PORTMAN & ASSOCIATES



Figure 18. Hong Kong as an East Asian hill town. Left: Hill Road, Sai Wan. Right: Stairways around Man Mo Temple, Sheung Wan.

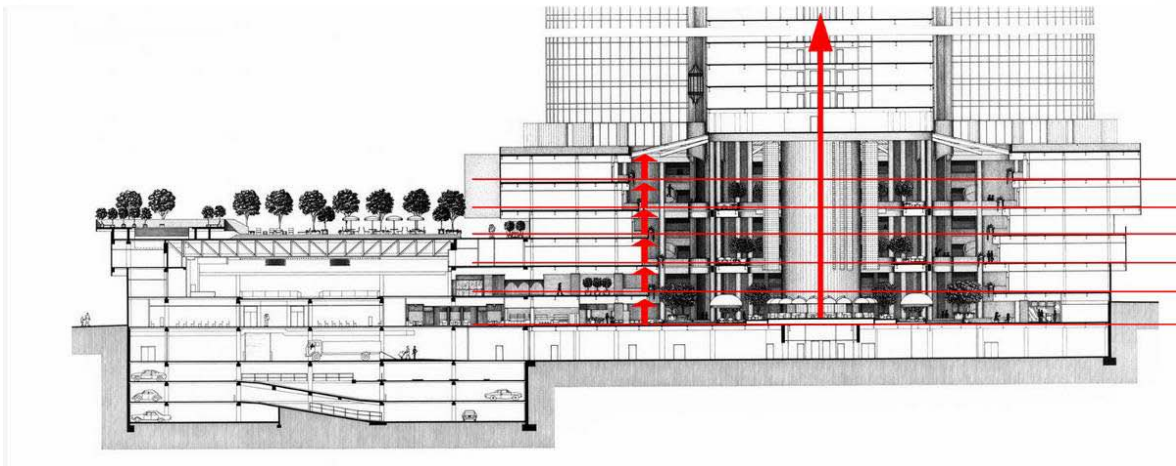


Figure 19. Portman’s Westin Bonaventure Hotel, section with author’ markings. It shows the difference between Jerde and Portman’s spaces.

Source: John Portman & Associates.

6. Casbah and Market Tyranny

The conclusion of this chapter is drawn from Walter Benjamin's writing about the "porosity" of Naples. Benjamin, in "Naples," depicted an improvised urbanity in which the built-environment was "divided into simultaneously animated theatres," in which the buildings and actions interpenetrated each other.²²⁴ As Jon Jerde openly says, cited by Norman M. Klein, his shopping centers are "toy towns" with "Casbahs."²²⁵ The hill town metaphor prevails in Jerde Partnership's projects, either indoor or outdoor. Aside from the spatial feature of a hill town, Jerde's architectural language encompasses an entire toolkit of elements which is derived from the Mediterranean landscape. Although ambiguity and chaos is rather a "designable event" and improvisation of space is carefully predetermined in these shopping centers, Jerde's allusion to hill towns is not merely a gesture for the enormous machines of consumerism. Jon Jerde's fascination with the Mediterranean hill towns reflects architects' consistent interest in and changing attitudes to an improvised urbanity. For Le Corbusier, the Casbah is a natural, primitive landscape which his viaduct and *politis* should intrusively pass over.²²⁶ Le Corbusier's attitude towards the Casbah was typical of modernist architects, who usually saw the messy Islamic quarter as a part of the topography to be conquered. With that in mind, the cityscape of Hong

²²⁴ Walter Benjamin and Asja Lacin, "Naples," 1986.

²²⁵ See Norman M. Klein, "The Electronic Baroque: Jerde Cities," in *You Are Here: The Jerde Partnership International*, ed. Frances Anderton (London: Phaidon Press, 1999), pp. 112-121.

²²⁶ Zeynep Çelik, *Urban Forms and Colonial Confrontations: Algiers under French Rule* (Berkeley: University of California Press, 1997), 43. Fumihiko Maki, *Investigations in Collective Form*, St. Louis, MI: The School of Architecture, Washington University, 1964.

Kong, with mountainous topography and pragmatic sharing of spaces, can be seen as a variant of the Casbah in East Asia (Fig. 18). With reference to “porosity,” it is clear that Jerde Partnership’s vertical shopping centers have set forth a new agenda for architecture and urbanism, in terms of architecture’s relationship with the vernacular urban fabric. On the one hand, the exterior of these vertical shopping centers has been encapsulated by the forest of concrete towers of Hong Kong.²²⁷ On the other hand, the grand interior spaces condensed the original streetscape of Hong Kong. It is worth noting that, in contrast to the *intérieur* in Benjamin’s lexicon, the exterior and interior of these consumer spaces are not mutually exclusive. The exterior is by nature the *intérieur* of a larger panoramic landscape in scale of the city. Most importantly, the extreme height of Hong Kong’s consumer space restructured the interconnection between “panorama” and its “narrative.” Hong Kong’s urban context gives Fredric Jameson’s analysis of the Westin Bonaventure Hotel a new perspective.

A challenge for Hong Kong’s vertical shopping center is that the vertical circulation has to permeate through an array of floor plates. In a confined building footprint, escalators, with considerable length in both vertical and horizontal dimensions, exert a great impact on store frontage as a marketable element in retail operations. However, this challenge impelled Hong Kong’s retail operators to adopt alternative ways to rearrange the form of store frontage in shopping centers. Additionally, different functions come to an agreement for sharing floor spaces

²²⁷ In “Langham Place and Portland Street,” Hong Kong poet Leong Ping Kwan (1949-2013) remarks that Langham Place has been assimilated by Mong Kok, and the shopping center interiorized the original features and chaos of Portland Street.

(e.g., restaurants sharing with an ice skating rink; kid's playground sharing with stores). Another architectural implication of this ambiguity is that, with the differentiation of express and local escalators, the uniform rhythm and proportion of the interior elevation, displayed by the consistent floor-to-floor height, is broken by the intermeshing of the express and local elevators. Thus, the extreme verticality resulted in the dynamics and chaos which do not exist in shopping centers of fewer floors.

The emergent consumer spaces in Hong Kong offer an alternative perspective for examining architects' engagement in urban boosterism. This boosterism is not only about imagery of the city, but about communication and infrastructure. Consumer spaces are playing a critical role in those East Asian cities whose identity and features have been somehow demolished in the process of rapid modernization. These panoramic interiors created a public for intimate bodily contact, and engaged the shoppers in a global time. As opposed to monumental structures, such as art museums, state buildings, and landmark skyscrapers, shopping centers are seamlessly connected to the everyday lived experience of a city. Jerde's practice shows great respect for the porosity and connectivity in Hong Kong's urban fabric, and extends these qualities to the interior space. It represents a new tendency in which more shopping centers attempt to break the conventional "podium-tower" stereotype. Urban chaos of lower levels is penetrating into higher levels.

Urban scholars have been constantly obsessed by the way in which communication can be revealed by certain esthetics. Despite the emerging self-contained residential and commercial mega-structures, Hong Kong has a backdrop made of impromptu townscape, with flexible subdivisions of multi-usage spaces, informal dwellings on rooftops and balconies, and contingent

interpenetration between different properties or tenants. However, this traditional Hong Kong streetscape is diminishing due to recent large-scale urban restructuring. The new integrated developments have to some extent inherited this spatial complexity. The esthetics of congestion, which is typical of the traditional Hong Kong built environment, has been incorporated into the global consumerism and become a part of marketing strategy and design techniques. When these improvised scenarios are translated into commercial design approaches, they begin to be inevitably subject to market tyranny. Although Jerde Partnership and other retail architects have made endeavors to represent the authentic urbanity of Hong Kong in the tremendous interior spaces, the visual chaos and complexity must be carefully controlled do as to comply with the business model. In other words, the esthetics and forms must generate capital returns. Nevertheless, the new consumer space implies a substitute for the loss of proximity and public places in the contemporary civic society.

Chapter 6. Conclusion

1. Hong Kong Section in Retrospect

It should be further examined whether the vertical section of Hong Kong can be generalized as a new urbanism not only for East Asia but also for all world cities. The fused infrastructure-superstructure development weaves up a rampant, three-dimensional mat of urban circulation. As previously discussed, the myth of Hong Kong's vertically integrated urban pattern can be boiled down to a few determinants – planning regulation and building codes, urban geography, evolving programmatic demands and the pattern of public transportation. In practice these determinants are interconnected and constituted a market and regulatory environment for development. In addition, the Hong Kong cityscape is complicated by its own specificity mainly due to the city's particular geographical and political role in this region. The contingency of Hong Kong's rise on the margin of the Chinese regime as a colonial city shaped the path of its modernization and subsequently its organization of city functions. Hong Kong wisely unified two independent forces, the real estate developers and a knowledge class, as to implement comprehensive city plans which usually requires a strong and authoritarian government. As a result, Hong Kong has developed a whole set of approaches in guiding the development intensity to the catchment of transportation interchanges. These approaches can be summarized as:

1. Vertical integration and ordering of city functions (first mentioned in Colony Outline Plan, 1969);
2. Enhanced vertical circulation as continuous shopping experience(as typical business model

in vertical consumer spaces);

3. Grade-separation of pedestrians and vehicles (first appearing in the 1961 Central Area Redevelopment, stipulated by Hong Kong Planning Standards and Guidelines);

4. Integration of public transit and property development (metro stations' air-rights development, rail-property development program, first appearing in 1979) , which occurs on basis of different forms of contracts between MTR and the consortium and developers;

5. The principle of “self-containment” and “environmental areas” in the development of new settlements and business complexes.

6. Entanglements between the private and the public spaces (“POPS” in lease terms from 1980);

7. Vertical sorting and filtering of input and output riders and travelers (in some train station interchanges and checkpoints);

8. The statutory plans and its related urban design control which dominate the particulars of site planning (usually the way in which separate building blocks are interconnected at different levels).

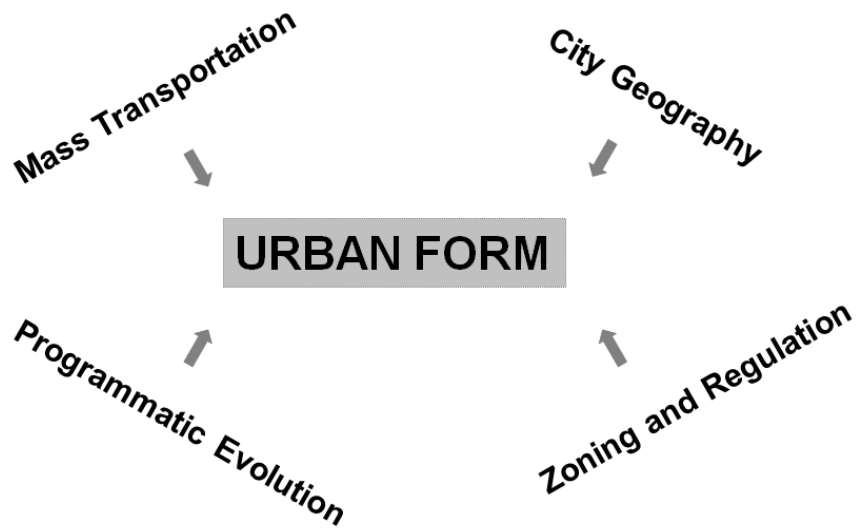


Figure 1. The four determinants of urban form.

Remarkably, the exploration of *Hong Kong Section* should not be oriented to a ready-made toolkit for architects' future practices or even for marketing strategy. The urban form of Hong Kong is the outcome of a multitude of geographical, social, historical determinants. These approaches enumerated above were usually adopted in a combinatory way in each development. For instance, Sha Tin town center seamlessly adjoins the KCR station, and at the same time adopted the POPS terms; the case of Luohu Checkpoint contains both a "TOD" model and the "channelization" principle; Langham Place features enhanced vertical circulation, networked elevated pedestrian links and as well the POPS terms. Although the interaction between the expansion of market and the mobility or immobility played a prominent role in the shaping of these sites, geographic and historical conditions are crucial requisites. Thus, assuming that these geographic and historical conditions are separate but interconnected, this work aims to illuminate a more comprehensive depiction of the institutional foundation for generating urban forms which

are more sustainable and compact for world cities suffering overcrowding.

With that said, there is a pressing need for a discourse about the density in a context. Urban studies should develop more analytical devices to identify the variables and structures of the emergent urban form. The conclusion of this study should illuminate the discipline of architecture and planning in both historical and spatial senses. Historically, the Hong Kong way of building is determined by a sequence of reactions to urban crises from the 1950s to the MacLehose Era. Hong Kong's current built environment is the outcome of a multitude of determinants which are interdependent from each other. Such building culture ensured relatively high performance and low cost, with few considerations of esthetics. Architectural embellishments and landscaping were usually employed in a stingy way. Spatially, the Hong Kong way of building is subject to the limited footprint the city which has been built on. The steep water edge and the fragmented pattern of lot subdivision generated a colonial vernacular, which was composed of tenement buildings with informal adaptation. Both the historical and spatial background gave rise to a silent social protocol in sharing spaces. To be more specific, investigations has been attempted to find the synergy of these separate but interconnected conditions.

Hong Kong in the post-1997 era has eventually deviated from its comprehensive planning mechanism when existing institutional arrangement is unable to cope with the arising civic consciousness and surging social movement for more democratic administration. The "knowledge class" growing up in the MacLehose Era (1971-1982) has been superseded by a younger "post-80s" generation, who tend to lean towards street protests and direct confrontation for social conflict resolution rather than compromise and compliance. The planning practice of

Hong Kong has been trapped in a bottleneck of distrust, in which the traditional planning visions are of no direct interest for the new generation and at the same time this generation hardly has any access to the government's decision making process. However, the surging social movement undermines the very foundation of the integrated developments of Hong Kong, which could be somehow attributed to an embedded ideal of welfare state in the day-to-day planning practice. In post-1997 era, inarguably the physical urban pattern of Hong Kong continued to stick with the planning goal and momentum pre-set before the handover of sovereignty. This goal has been openly challenged by the deepening integration between Hong Kong and the entire Pearl River Delta. Like the once new scale in infrastructural, residential and commercial development which was grasped by Hong Kong in the 1970s and 80s, Hong Kong tends to grasp an even ambitious scale in the new Century, which is represented by the so called "Ten Major Infrastructural Projects."²²⁸ Four of the ten projects require collaboration with other Chinese cities such as Shenzhen, Macau, Guangzhou and Zhuhai. With the foreseeable completion of these infrastructural projects in the near future, the magnitude of the new mobility, connectivity and accessibility would undoubtedly deepen the unification of existing highways and metros with a national transportation network. This unification will bring about another round of spatial restructuring and simultaneously more serious social concerns.

²²⁸ The "Ten Major Infrastructural Projects" are: 1. South Island Line; 2. Sha Tin to Central Line; 3. Tuen Mun Western Bypass and Tuen Mun-Chek Lap Kok Link; 4. The Guangzhou-Shenzhen-Hong Kong Express Rail Link; 5. Hong Kong-Zhuhai-Macau Bridge; 6. Hong Kong-Shenzhen Airport Co-operation; 7. Hong Kong-Shenzhen Joint Development of the Lok Ma Chau Loop; 8. West Kowloon Cultural District; 9. Kai Tak Development Plan; 10. New Development Areas.

2. Concluding Statements

I would like to conclude this dissertation with a set of new perspectives from which the case study of Hong Kong urbanism can contribute to the existing literature about the population density, the cityscape of East Asian modernity and changing form of public realm. First, the study enriches the meaning of “Culture of Congestion” and facilitates a more comprehensive understanding of an alternative reality of modernity, with urban density as a key variable. Second, it defies the traditional notion of the ground surface in planning and architectural practice, questions existing assumptions of the public spaces, and lastly profiles a new dimension in which a new notion of the public can be built. Third, it offers a new analytical dimension to look into the classical studies of spatial sociology on the emergent space types of capitalism (arcades, panoramas, exhibitions, department stores) in the architectural and planning discourse. In that sense, this dissertation attempts to illuminate both a new framework of high-density urbanism and a new narrative of Asian urban history; neither of the two can be substantiated without each other.

2.1 Rail-Property Integration as a Way to Guide Urban Restructuring

The R+P development of Hong Kong implies a new way in which the superstructure and infrastructure can work as a whole. The development model has been broadly implemented in Hong Kong, Singapore, Japan and subsequently in Mainland China. Moreover it has been already incorporated into their everyday space. In Hong Kong, the Mass Transit Railway Corporation has been responsible for designing all the interfaces between the station structure and the commercial property. This development model abandoned the traditional way of construction which treats the metro station as an independent concrete box with its separate

right-of-way. However, in many cases of Hong Kong, such as the East Point Center at Causeway Bay, the metro station was built together with the building basements as a part of the podium. The structural grids of the superstructure should be laid out in compliance with the train yard and platforms. Alongside this infrastructure-superstructure integration was an economic device called “value capture,” which allows the operators of mass transportation to benefit from the capital returns generated by the commercial and residential properties. And this capital return can help assist the day-to-day maintenance of the mass transportation. At last, the rail-property integration also implies a new form of multiple-ownership alongside the vertical dimension. It illuminates a new way of planning that spaces at different heights can be pre-zoned for different uses as long as a spatial protocol is reached and interfaces between different programs are predesigned.

Inarguably the rail-property integration has been used to optimize the city centers and new towns as well. First, with its land granting and supreme power in urban redevelopment, MTR functions as a semi-state agency in the distribution of infrastructure and land resources. It has turned out that, without a strong stakeholder or a dominant land owner, collective urban form can be hardly built and coordinated on the intensively subdivided land. Second, with more new self-contained settlements appearing in the mountainous suburban areas, Hong Kong successfully decentralized its metropolitan population from the traditional city center. In hindsight, public transportation of Hong Kong not only resolved congestion as a serious social issue, but incubated a social form for high-density living.

2.2 Architectural Practices Fused with Programming

Hong Kong is traditionally not a hotbed for architects’ egos. The first generation of Hong Kong architects, mostly immigrants from Mainland China and from other Commonwealth states after

the World War II, was superseded by a new generation of architects. The new generation belonged to the “knowledge class” growing up in the MacLehose Era. While the first generation usually practiced as independent practitioners, the new generation of architects was hardly referred to as independent designers rather than a team of technocrats belonging to a larger business. Architectural practice and planning of Hong Kong became a part of contract making and has been more and more subject to the programmatic demands instead of the doctrines of modernism. Approximately from the late 1970s, when more and more landscape architects entered into the design market of large civic projects in Hong Kong, the traditional way of architectural practice was challenged by firms featuring full services. This multi-disciplinary collaboration forced architects to be more respectful of planning regulation, management and marketing. Simultaneously, for many private developments in Hong Kong, the shell-core model allowed flexible subdivision by tenants, and facilitated the diversification of cityscape. Hong Kong is immersed in a reality privileging programmatic needs over building form.

In light of the architectural practicing environment of Hong Kong, “Generic modernism” is the neologism I coined to characterize the general attitude of architectural practice in the modernization of Hong Kong and East Asia. The market-driven design practice dismissed any architectural expressions or styling as detachable ornaments. This subservience to marketing and business programs has twofold disciplinary implications. First, it cultivates a new esthetics of architecture and urban design. It creates extremely condensed building forms and resultantly urban forms as the materialization of market rules. Second, these complicated, stringent planning regulation and market rules urged architects to provide alternative paradigms for approaching the design goals. It even pushes the design schemes to a higher performance. These paradigms might not be uncritically accepted as a universal model, but as a site-specific solution.

2.3 Public Space as Performance instead of Service

The POPS policy of Hong Kong empowered the atriums and concourses in the podiums to perform as gathering spaces for the public. I would like to argue that the impression of the public and private spaces is the vestige of the Age of Enlightenment and it is not able to comply with the new reality of Asian urbanism. The meaning of public and private spaces has become controversial and blurry with the emergence of new forms of public space in Hong Kong. Compared to New Yorks POPSs, the POPSs in Hong Kong are tightly fused with shops, restaurants and other amenities, exhibiting a seamless integration of the paid and unpaid spaces. For a long period of time Hong Kong people were not aware of the existence of the public spaces owned and operated by the private owners. Although so far people's recognition of the POPS has been improved a lot, these spaces are dotted in the entire commercial environment of Hong Kong and they have no intention to be separated from the shopping arcades and office lobbies. Conversely, this ambiguity questions the literal meaning of public space.

Normally a public space can be 1) a civic space as public property, which is unconditionally open and accessible to all people, including civic plazas, public roads and streets, parks; 2) privately owned public space, which refers to floor areas within a private property dedicated for public use, such as the atriums of shopping malls, thoroughfares within a property, porticos, roof tops stipulated as being accessible to the public; 3) mobile space, which refers to the interior of buses, trains and ferries; 4) instant or portable public space, which is based on instant events, congregation and all forms of gathering. One problem which renders the current practice of public space unsustainable (not limited to Hong Kong) is those who use the public space are not the ones who maintain it. Thus, this confusion and internal paradox concerning the public space

urges us to redefine the public space as a function or performance instead of a service. The case of Hong Kong indicates that the meaning of “the public” becomes elusive in a global city such as Hong Kong, in which the public also include a floating global population. Our attention should be drawn from how a public space is provided or designed to how it performs in a reality. Finally, the public space must be more adapted to people’s changing behavior in networking and communication.

2.4 Architecture as an Integral Part of Topography

It is widely presumed that the ground surface is a continuous plane and a stable reference point. However, the intensive exploitation of the podium space has formed a sandwich structure which accommodates pedestrians, vehicles and trains at different levels. The continuous podiums of Hong Kong and the intensively built urban circulation have exhibited a new form of urban topography. This new topography is three-dimensionally composed and fused both landscape and architecture. Westerners have long been attracted by the informal adaptation which occurred on rooftops and balconies of the mid-century tenements buildings of Hong Kong. It can be asserted that this impromptu impacted the environmental design of the large-scale commercial and residential developments after the 1970s. Furthermore, because pedestrian podium has been so seamlessly integrated with the steep hillside of Hong Kong, its emergent form is redefining the meaning of topography itself.

The reclamation of land has long been adopted by Hong Kong as the major solution to increase land supply for ceaseless urban redevelopment. Roughly from the 1960s, Hong Kong began to engage in large infrastructural projects such as waterfront redevelopment, expressways, cross-harbor tunnels and metros. The rail-property integration, pedestrian links and POPS

radically changed the ground surface of Hong Kong and a new set of social codes have been established in relation to this topographic evolution. Conversely, these changing social codes are impacting the way in which spaces are valued and agreements are made in Hong Kong, subsequently impacting the urban form. One critical outcome of this topographic change is that the rampant interior spaces have become not only an extension of the topography but also a independent ecology. The intrusion of the urban and geographic dimension into architecture yielded concerns about the environment, technology and human condition, which have never been well answered by the discipline of architecture and urbanism.

2.5 The Esthetics of Density and its Social and Historical Content

Lastly, as previously discussed in Chapter 2, the measurement of density is associated with concepts such as population density, mixed-usage, activity and development intensity and perception of congestion. All these parameters cohere to each other to consolidate into a formal theory about congestion. It is noteworthy that this formal theory should be positioned in a historical context and it implies concrete historical content. Basically the discourse around the “Culture of Congestion” is built on metropolitan urbanism in the context of the developed West. When the urbanism of Hong Kong is recognized as an Asian model of congestion, urban scholars tend to detach the historical content from its urban form. Even if the urbanism of Hong Kong can be generalized as a series of recipes to revive the declining urbanity in the metropolises of the West, these recipes (rail-property integration, POPS, multiple-ownership, vertical zoning, etc.) must be critically examined in the context of East Asian history. To be more specific, without the civil war of China and the Chinese diaspora, without land granting for MTR, without the Country Parks Ordinance which allowed the natural reserves to cover 40% of the territory,

without an executive-led government sticking with the British way of comprehensive planning, the urban form of Hong Kong would have probably take a different path. One counter-example is Singapore. Occupying a piece of land equivalent to Hong Kong, Singapore does not have a three-dimensional spatial integration as complicated as Hong Kong. Even in Hong Kong, the traditional political and economical condition sustaining its urban form is dying away. The surging social movement, led by the new “post-80s” generation, is undermining the executive-led governance and changing Hong Kong’s public space and subsequently the social foundation of high-density living.

Beyond the case study of Hong Kong, there is a critique for contemporary urbanism in the developed West. Fundamentally, from a perspective of East Asian urbanism, sensitivity to the art of sharing has been missing for so long in the planning practice of the West. The loss of proximity in the public sphere is not only the consequence of the economic shift from manufacturing to knowledge, but also of an imbedded mentality which sees the density of space as a menace to social order and public safety. The fear of proximity and the emergence of an intimate society are urging architects to abandon their social responsibility in terms of the design of the public sphere. Thus, the problem of the over-population could be technical, social and cultural as well. The significance of Hong Kong is that it presents a realistic model for high-density living while maintaining relatively high environmental standard and social coherence. It is still possible that congestion can bring about new social institutions and urban forms, and at the same time sustain this distinctive urban form both economically and socially. After all, the collective lifestyle, as a modernist dream lingering on in today’s planning practice, will continue to dominate the value of architecture and urbanism.

Bibliography:

- Abercrombie, Patrick. *Hong Kong Preliminary Planning Report*. Hong Kong: Hong Kong Government Printer, 1948.
- Ackerman, James S. *Origins, Imitation, Conventions: Representation in the Visual Arts*. Cambridge, MA: The MIT Press, 2002.
- Allen, Stan. "From Object to Field: Field Conditions in Architecture and Urbanism." In *Practice: Architecture, Technique and Representation*, edited by Stan Allen. London: Routledge, 2009.
- Allen, Stan. "Mat Urbanism: The Thick-2d." In *Le Corbusier's Venice Hospital and the Revival of Mat Building, Case #2*, edited by Hashim Sarkis. New York: Prestel, 2001.
- Anderton, Frances, ed. *You Are Here: The Jerde Partnership International*. London: Phaidon, 1999.
- Arkaraprasertkul, Non. *Shanghai Contemporary: The Politics of Built Form*. Saarbrücken: VDM Publishing, 2009.
- Bacon, Edmund. *Design of Cities*. London, Penguin Books, 1976.
- Balbour, Alan. *Rockefeller Center: Architecture as Theatre*. New York: McGraw-Hill Inc, 1978.
- Bender, Thomas. "Architecture and the Journalism of Ideas." *Design Book Review*, no. 15 (1988): 47-49.
- Benjamin, Walter, and Asja Lacis. "Naples." Translated by Edmund Jeffcott. In *Reflections: Essay, Aphorisms, Autobiographic Writings*, edited by Peter Demetz. New York and London: Hellen and Curt Wolff Book, 1986.
- Benjamin, Walter. *The Arcades Project*. Translated by Howard Eiland. Cambridge, MA: The Belknap Press of Harvard University Press, 1999.
- Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity*. New York: Simon and Schuster, 1982.
- Berry, Chris. "The City Is Elsewhere." In *Cinema at the City's Edge: Film and Urban Networks in East Asia*, edited by Yomi Braester and James Tweedie, 166-83. Hong Kong: Hong Kong University Press, 2010.
- Bosman, Jos. "Form Follows Function: From Meta-city to Mega-city." *Daidalos 74* (2000): pp.30-37.
- Bracken, Gregory, ed. *Aspects of Urbanization in China: Shanghai, Hong Kong, Guangzhou*. Amsterdam: Amsterdam University Press, 2012.
- Breitung, Werner. "Transformation of a Boundary Regime: The Hong Kong and Mainland China Case." *Environment and Planning A 34* (2002): 1749-62.
- Bristow, Roger. *Hong Kong's New Towns: A Selective Review*. Hong Kong: Oxford University Press, 1989.
- Bristow, Roger. *Land-Use Planning in Hong Kong: History, Policies and Procedure*. Oxford: Oxford University Press, 1984.

- Buchanan, C. D. et al. *Traffic in Towns: A Study of the Long Term Problems of Traffic in Urban Areas*. Reports of the Steering Group and Working Group Appointed by the Minister of Transport, London: H.M.S.O., 1963.
- Bureš, Jaroslav. "Peter Parlers Chor in Kolin Und Seine Beziehung Zur Prager Bauhütte Im Lichte Der Schriftlichen Quellen." *Gesta* 28, no. 2 (1989): 136-46.
- Cartier, Carolyn. "Transnational Urbanism in the Reform-Era Chinese City: Landscapes from Shenzhen." *Urban Studies* 39 (2002): 1513-32.
- Caryl, Christian. *Building the Dragon City: History of the Faculty of Architecture at the University of Hong Kong*. Hong Kong: Hong Kong University Press, 2012.
- Castells, Manuel & Kwok, Yin Wang. *The Shek Kip Mei Syndrome: Economic Development and Public Housing in Hong Kong and Singapore*. London: Pion Limited, 1999.
- Castells, Manuel. "Space of Flows, Space of Places: Materials for a Theory of Urbanism in the Information Age." In *Rethinking Technology: A Reader in Architectural Theory*, edited by William W. Braham and Jonathan A. Hale. New York: Routledge, 2004.
- Castells, Manuel. *The Rise of the Network Society*. Cambridge, MA and London: Blackwell Publishers Ltd., 1996.
- Celik, Zeynep. *Urban Forms and Colonial Confrontations: Algiers under French Rule*. Berkeley, Los Angeles & Oxford: University of California Press, 1997.
- Cerdà, Ildefons. *The Five Bases of the General Theory of Urbanization*. Translated by Bernar Miller and Mary Fons i Fleming. Barcelona & Madrid: Electa, 1999.
- Certeau, Michel de. *The Practice of Everyday Life*. Translated by Steven Rendall. Berkeley, Los Angeles and London: University of California Press, 1984.
- Cervero, Robert, and Jin Murakami. "Rail and Property Development in Hong Kong: Experience and Extensions." *Urban Studies* 46, no. 10 (2004): 2019-43.
- Chase, John, Margaret Crawford, and John Kaliski, eds. *Everyday Urbanism*. New York: The Monacelli Press, 1999.
- Chung, Chuihua Judy, Jeffrey Inaba, Rem Koolhaas, and Sze Tsung Leong, eds. *Great Leap Forward*. Köln, Germany: Taschen, 2002.
- Chung, Chuihua Judy, Rem Koolhaas, Jeffrey Inaba, and Sze Tsung Leong, eds. *Harvard Design School Guide to Shopping* (Harvard Design School Project on the City). Köln: Taschen, 2002.
- Clark, Constance. "The Politics of Place Making in Shenzhen, China." *Berkeley Planning Journal* 12 (1998): 103-25.
- Clarke, R.C. "Planning in Hong Kong, Far East Architect & Builder," January 1965, 54-55.
- Cody, Jeffrey W., and James R. Richardson. "Urbanizing Forest and Village Trees in Hong Kong's Sha Tin Valley, 1976 - 1997." *Traditional Dwellings and Settlements Review* IX no. 1 (1997): 21-33.

- Colomina, Beatriz, and Craig Buckley, eds. *Clip, Stamp, Fold: The Radical Architecture of Little Magazines 196x - 197x*. Barcelona: Actar, 2010.
- Crawford, Margaret, and Alan Berger. *Nansha Coastal City: Landscape and Urbanism in the Pearl River Delta*. Cambridge, MA: Harvard University. Graduate School of Design, 2004.
- Cuff, Dana. "Community Property: Enter the Architect or, the Politics of Form." In *Slow Space*, edited by Michael Bell and Sze Tsung Leong, 120-40. New York: The Monacelli Press, 1998.
- Cumine, Eric. *Hong Kong Ways and Byways*. Hong Kong: Belongers Publication, 1981.
- Cuthbert, Alexander R. "Urban Design: Requiem for an Era – Review and Critique of the Last 50 Years." *Urban Design International* 2007, no. 12 (2007): 177–223.
- Cuthbert, Alexander R. "Hong Kong 1997: the transition to socialism—ideology, discourse, and urban spatial structure." *Environment and Planning D, Society and Space*, vol 5 (1987): 123-150.
- Cuthbert, Alexander R. "The Landscape of Capital." In Symposium on Urban Design held by the Hong Kong Institute of Planners. Hong Kong: University of Hong Kong, Centre of Urban Studies and Urban Planning 1985.
- Dwyer, D.J., ed. *Asian Urbanization: A Hong Kong Casebook*. Hong Kong: Hong Kong University Press, 1971.
- Evans, Robin. *The Projective Cast: Architecture and Its Three Geometries*. Cambridge, MA: MIT Press, 1995.
- Four Hong Kong Architects Discuss..., *Far East Architect and Builder*, January 1968, pp. 43-46.
- Freeman, Fox, Wilbur Smith and Associates. *Hong Kong Mass Transport Study*. Hong Kong: Government Printer Hong Kong, 1971.
- Frisby, David. *Cityscapes of Modernity: Critical Explorations*. Cambridge: Polity, 2001.
- Fyfe, Nicholas R. ed. *Images of the Street: Planning, Identity, and Control in Public Space*. London: Routledge, 1998.
- Gandelsonas, Mario (ed.). *Shanghai Reflections: Architecture, Urbanism, and the Search for an Alternative Modernity*. New York: Princeton Architectural Press, 2002.
- Gandelsonas, Mario. *X-Urbanism: Architecture and the American City*. New York, Princeton Architectural Press, 1999.
- Geist, Johann Friedrich. *Arcades: The History of a Building Type*. Cambridge, MA: MIT Press, 1983.
- Gold, J. R. "The Making of a Megastructure: Architectural Modernism, Town Planning and Cumberland's Central Area, 1955-1975," *Planning Perspectives*, Vol 21(2006), 109-131.
- Gu Daqing. "Affordability as the Inspiration of Design for Public Housing: A Preliminary Study on the Design Characteristics of Early Public Housing in Hong Kong", *Time+Architecture*, Issue 120, 07(2011).
- Guillerme, Jacques and V erin, H el ene. "The Archaeology of Section," *Perspecta* (1989), Vol. 25, 226-257.

- Gutierrez, Laurent, and Valérie Portefaix. "Liquid Journey, Central Mid-Levels Escalator." (1999), <http://map-office.com/publication>.
- Hall, Gary and Birchall, Clare. *New Cultural Studies: Adventures in Theory*. Edinburgh: Edinburgh University Press, 2006.
- Hardt, Michael, and Antonio Negri. *Multitude: War and Democracy in the Age of Empire*. New York: Penguin Books, 2005.
- Harvey, David. *Paris, Capital of Modernity*. New York: Routledge, 2005.
- Harvey, David. *The Condition of Postmodernity*. Hoboken, NJ: Wiley, 1989.
- Hassenpflug, Dieter. "Walter Benjamin: Looking at the Dream-Side of the City," in *Cities in Transition*, edited by Arie Graafland. Rotterdam: 010 Publishers, 2001.
- Hays, K. Michael, ed. *Architecture Theory since 1968*. Cambridge, MA: The MIT Press, 1998
- Herzog, Lawrence A. "Border Commuter Workers and Transfrontier Metropolitan Structure Along the U.S.-Mexico Border." In *U.S.-Mexico Borderlands: Historical and Contemporary Perspectives*, edited by Oscar J. Martinez. Wilmington, DE: Scholarly Resources Inc., 1996.
- Hong Kong Director of Public Works. *City of Victoria: Hong Kong Central Area Redevelopment*. Hong Kong: The Government Printer, 1961.
- Hong Kong Town Planning Division, *Town Planning in Hong Kong*, Hong Kong: Town Planning Division, 1984.
- Hope, E and Ryan, K. *The City in Architecture, Recent Works of Rocco Design Limited*. Mulgrave, Vic: Image Publishing, 2002
- Jameson, Fredric. "Future City." *New Left Review* 21 (May June 2003): 65-79.
- Jameson, Fredric. "The Westin Bonaventure Hotel." In *The Postmodern Presence: Readings on Postmodernism in American Culture and Society*, edited by Arthur Asa Berger. Walnut Creek, CA: AltaMira Press, 1998.
- Karakiewicz, J. "The City and the Megastucture." In M. Jenks and N. Dempsey (eds.) *Future Forms and Design for Sustainable Cities*, Oxford. Architectural Press, 2005, 137-142.
- Kayden, Jerold S., The New York City Department of City Planning, and The Municipal Art Society of New York. *Privately Owned Public Space: The New York City Experience*. New York: Wiley, 2000.
- Koolhaas, Rem and Obrist, Hans Ulrich. *Project Japan: Metabolism Talk*. New York: Taschen, 2011.
- Koolhaas, Rem. "Singapore, Portraint of a Potemkin Metropolis; Songlines...Or Thirty Years of Tabula Rasa." In *S, M, L, XL*, edited by Rem Koolhaas and Bruce Mau O.M.A., 1009-89. New York: The Monacelli Press, 1995.
- Koolhaas, Rem. *Delirious New York: A Retrospective Manifesto for Manhattan*. New York: Monacelli Press, 1978.

- Krätke, Stefan. "Regional Integration or Fragmentation? The German - Polish Border Region in a New Europe." *Regional Studies* 33, no. 7 (1999): 631-41.
- Kwok, Reginald Yin-Wang. "Last Colonial Spatial Plans for Hong Kong: Global Economy and Domestic Politics." *European Planning Studies* 7, no. 2 (1999): 207-29.
- Lai, Lawrence W.C. *Town Planning in Hong Kong: A Critical Review*. Hong Kong: City University of Hong Kong Press, 1997.
- Lai, Lawrence W.C., and Mark Baker. "The Final Colonial Regional Plan That Lingers On: Hong Kong's Metroplan." *Habitat International* 41, January (2014): 216-28.
- Lambot, Ian, and Greg Girard. *City of Darkness: Life in Kowloon Walled City*. Haslemere: Watermark, 1993.
- Lash, Scott. *Another Modernity: A Different Rationality*. Hoboken: Wiley, 1999.
- Lau, S.S.Y., R. Giridharan, and S. Ganesan. "Multiple and Intensive Land Use: Case Studies in Hong Kong." *Habitat International* Vol.29 (2005): 527-46.
- Law, Lisa. "Defying Disappearance: Cosmopolitan Public Spaces in Hong Kong." *Urban Studies* 39, no. 9 (2002): 1625-45.
- Li, Shiqiao. "Chinese Cities as Megacities." In *Representation and Spatial Practices in Urban South Africa*, edited by Leora Farber, 273-85. Johannesburg: Research Centre, Visual Identities in Art and Design, Faculty of Art Design and Architecture, University of Johannesburg, 2008.
- Li, Shiqiao. "Terminating Architecture: Mega-Development in Hong Kong." *Theory, Culture & Society*, Vol. 30 (2013): 277-89.
- Lim, William S. W. *Asian New Urbanism and Other Chapter*. Singapore: Select Books, 1998.
- Lin, George C.S. "Hong Kong and the Globalization of Chinese Diaspora: A Geographic Perspective." *Asian Pacific Viewpoint* 43, no. 1 April 2002: 63-91.
- Lo, Edward W. M. "Urban Design Control in Hong Kong." *Planning & Development* Vol. 8, No. 2 (1992): 23-27.
- Longstreth, Richard. *City Center to Regional Mall: Architecture, the Automobile, and Retailing in Los Angeles, 1920-1950*. Cambridge, MA: MIT Press, 1998.
- Lu, Duanfang. *Remaking Chinese Urban Form: Modernity, Scarcity and Space, 1949-2005*. London: Routledge, 2006.
- Lu, Leslie. "The Asian Arcades Project: Progressive Porosity." *Perspecta* 36, Juxtapositions (2005): 86-91.
- Lui, Tai-lok. "The Malling of Hong Kong." In *Consuming Hong Kong*, edited by Gordon Mathews and Tai-lok Lui. Hong Kong: Hong Kong University Press, 2001.
- Ma, G. (2011) *Xianggang gong cheng kao : shi yi ge jian zhu gong cheng gu shi, 1841-1953*, Hong Kong: Joint Publishing.
- Maki, Fumihiko. *Investigations in Collective Form*. St. Louis, MI: The School of Architecture, Washington

- University, 1964.
- Mass Transit Railway Corporation. *Official Souvenir Book to Commemorate the 1st Day of Running MTRC Trains*, Mass Transit Railway Corporation, 1979.
- Mateo-Babiano, Iderlina et al. "Street Space Renaissance: A Spatio-Historical Survey of Two Asian Cities." *Journal of the Eastern Asia Society for Transportation Studies*, Vol. 6 (2005): 4317 - 4332.
- Mathews, Gordon, Eric Kit-wai Ma, and Tai-lok Lui. *Hong Kong, China: Learning to Belong to a Nation*. New York: Routledge, 2008.
- Mathews, Gordon. *Ghetto at the Center of the World: Chungking Mansions*. Hong Kong. Chicago: University of Chicago Press, 2012.
- Mcdonough, Tom, ed. *The Situationists and the City*. London and New York: Versobooks, 2009.
- Öniş, Ziya. "The Logic of the Developmental State." *Comparative Politics* 24, no. 1 (October 1991): 109-26.
- Ortolano, Guy. "Planning the Urban Future in 1960s Britain." *The Historical Journal* 54, no. 2 (2011): 477-507.
- Pearce, G. (ed.). *Arup: Hong Kong Station*. Stuttgart/London: Edition Axel Menges, 2001.
- Perez-Gomez, Alberto and Pelletier, Louise. *Architectural Representation and the Perspective Hinge*. Cambridge, MA: MIT Press, 2000.
- Picon, Antoine. *French Architects and Engineers in the Age of Enlightenment*. Translated by Thom, Martin. Cambridge: Cambridge University Press, 1992.
- Planning Department, "The Hong Kong Planning Standards and Guidelines", edited by Hong Kong Planning Department. Hong Kong, 2011.
- Pu, Miao, ed. *Public Places in Asia Pacific Cities: Current Issues and Strategies*. Dordrecht: Kluwer Academic Publishers, 2001.
- Pu, Miao. "Design with High-Density: A Chinese Perspective." In *Public Places in Asian Pacific Cities: Current Issues and Strategies*, edited by Miao Pu. Dordrecht, Boston and London: Kluwer Academic Publishers, 2001.
- Pun, K. S. "Urban Design Considerations in Hong Kong New Towns," in Chung, W. N. (ed.) *Contemporary Architecture in Hong Kong*, Hong Kong: Joint Publishing, 1989.
- Raynsford, Anthony. "Swarm of the Metropolis: Passenger Circulation at Grand Central Terminal and the Ideology of the Crowd Aesthetic." *Journal of Architectural Education*. Vol 50 (1): 2-14.
- Reps, John W. "The Cities of the Future." Department of City and Regional Planning, Cornell University, Ithaca, <http://urbanplanning.library.cornell.edu>.
- Rowe, Peter G. *East Asia Modern: Shaping the Contemporary City*. London: Reaktion Books Ltd, 2005.
- Rowe, Peter G. *Emergent Architectural Territories in East Asian Cities*. Basel: Birkhauser, 2011.

- Rumley, Dennis, and Julian V. Minghi, eds. *The Geography of Border Landscape*. New York: Routledge 1991.
- Saywell, James. "The Architecture of Kowloon Walled City: An Excerpt from 'City of Darkness Revisited'." (2014). <http://www.archdaily.com/493900>.
- Schlichting, Kurt C. *Grand Central Terminal: Railroads, Engineering, and Architecture in New York City*. Baltimore: The Johns Hopkins University Press, 2001.
- Scully, Vicent. *American Architecture and Urbanism*. New York: An Owl Book, 1988.
- Sennett, Richard. *Flesh and Stone: The Body and the City in Western Civilization*. New York: W. W. Norton & Company, 1996.
- Sennett, Richard. *The Conscience of the Eye: The Design and Social Life of Cities*. New York: Alfred A. Knopf, 1990.
- Sennett, Richard. *The Fall of Public Man*. New York: W.W. Norton & Company, 1974.
- Shane, Grahame. "The Machine in the City." In *The Urban Life World: Formation, Perception, Representation*, edited by Peter Madsen and Richard Plunz, 218-36. London and New York: Routledge, 2002.
- Shao, Shanbo, and Li Xuan. "Proposal for Refurbishing the Lo Wu Check Point Building." Hong Kong: One Country Two Systems Research Institute, 2002.
- Shao, Shanbo, and Li Xuan. "Review and Proposition for Hong Kong-Shenzhen Immigration Management and Border-crossing Procedures." Hong Kong: One Country Two Systems Research Institute, 2001.
- Shelton, B., Karakiewicz, J. and Kvan, T. *The Making of Hong Kong: From Vertical to Volumetric*, London: Routledge, 2010.
- Simmel, Georg. "Metropolis and Mental Life (1903)." In *The Blackwell Cityreader*, edited by Gary Bridge and Sophie Watson. Oxford and Malden, MA: Wiley-Blackwell, 2002.
- Sklair, Leslie. "Towards an Understanding of Architectural Iconicity in Global Perspective." In *Aspects of Urbanization in China: Shanghai, Hong Kong, Guangzhou*, edited by Gregory Bracken. Amsterdam: Amsterdam University Press, 2012.
- Smart, Alan, and Josephine Smart. "Time-Space Punctuation: Hong Kong's Border Regime and Limits on Mobility." *Pacific Affairs* 81, no. 2 (2008): 175-93.
- Smith, Peter Cookson. "Central Wanchai Reclamation: Urban Design Variables." *Planning & Development* 12, no. 2 (1996): 10-28.
- Smith, Peter Cookson. *The Urban Design of Impermanence: Streets, Places and Spaces in Hong Kong*. Hong Kong: MCCM Creations, 2006.
- Smithson, Alison, ed. *Team 10 Primer*. Cambridge, MA & London: The MIT Press, 1968.
- Solomon, Jonathan, Wong, Clara, & Frampton, Adam. *Cities Without Ground: A Hong Kong Guidebook*. San Francisco: ORO Editions, 2012.

- Sorkin, Michael, ed. *Variations on a Theme Park: The New American City and the End of Public Space*. New York: The Noonday Press, 1992.
- Su, Gin-Djih. *Chinese Architecture: Past and Contemporary*. Hong Kong: The Sin Poh Amalgamated (H.K.) Limited, 1964.
- Suisman, Douglas, R. *Los Angeles Boulevard: Eight X-Rays of the Body Public*. Los Angeles: Forum for Architecture and Urban Design, 1989.
- Tallon, Andrew J. "The Portuguese Precedent for Pierre Patte's Street Section." *Journal of the Society of Architectural Historians* 63, no. 3 (2004): 370-77.
- Urry, John. *Mobilities*. Cambridge, UK & Malden, MA: Polity Press, 2007.
- Waldheim, Charles and Berger, Allen. "Logistics Landscape." *Landscape Journal* 27 (2008), 219-246.
- Wall, Alex. "Programming the Urban Surface." In *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner (New York: Princeton Architectural Press, 1999), 233-249.
- Wang, Fei. "Secret of Section," *Time+Architecture*, Issue 2 (2010), 6-13.
- Wang, Liang-Huew. *An Analysis of Hong Kong Transit City*. Beijing: China Architecture & Building Press, 2014.
- Weisman, Winston R. "The First Landscaped Skyscraper." *Journal of the Society of Architectural Historians* Vol. 18, No. 2 (1959), 54-59.
- Wigglesworth, J.M. "The Development of New Towns." In Dwyer, D. J. (ed.), *Asian Urbanization: A Hong Kong Casebook*, Hong Kong: Hong Kong University Press, 1971.
- Willis, Carol. *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago*. New York: Princeton Architectural Press, 1995.
- Yep, Ray, and Lui, Tai-Lok. "Revisiting the Golden Era of MacLehose and the Dynamics of Social Reforms." *China Information* 24, no. 3: 249-72.
- Zhang, Weiping. *Invisible Logic: Hong Kong, as Asian Culture of Congestion*. Nanjing, China: Southeast University Press, 2009.
- Zou, Han, Charlie Q. L. Xue and Li Baiho "The Legacies of British Town Planners in Hong Kong." Proceedings of East Asia Architectural Conference, South of East-Asia: Readdressing East-Asia Architecture and Urbanism, National University of Singapore, May 2011.
