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台北市政府都市發展局 88.3.22.北市都秘字第 8820492800 號函。

李得全、宋寶麒，2001.，社區規劃師之意義、功能與角色，「台北市青年社區規劃師培訓班講義」，台北市：台北市政府都市發展局。

夏鑄九，〈1999〉，社區規劃師對都市發展的重要性，社區規劃師會議專題演講大綱。

許志堅、宋寶麒，2002.，民眾參與城市空間改造之機制－以台北市推動「地區環境改造計畫」與「社區規劃師制度」為例，第九屆（2002年）海峽兩岸城市變遷與展望研討會論文集，2002.8.24.，台南市國立成功大學。

陳亮全，1999.1.27.，致台北市政府都市發展局陳局長威仁信函。

陳威仁、宋寶麒，2001.，都市空間改造DIY－台北市推動「地區環境改造計畫」與「社區規劃師制度」經驗談，第二屆「上海－台北兩岸城市論壇」，上海。

曾旭正，1999.12.30.，市府團隊不點不亮？，「自由時報」，第十三版。

謝慶達、林賢卿譯，1993.，「社區建築－人民如何創造自我的環境」，台北市：創興。

TWO ASIAN MODELS OF PLANNING DECISION MAKING

Case Studies of the Planning Process in Singapore New Downtown and Kaohsiung Multifunctional Business District

Perry Pei-Ju Yang and Ze Li

ABSTRACT

Singapore and Kaohsiung, two major port cities in East Asia, have been facing urban physical changes through large-scale urban initiatives in the central city areas during the past decade. This paper explores how the distinctive planning systems in the two cities affect the local actions and help shape the physical environment and future scenarios. Two central city areas are investigated and taken as different Asian models for understanding the processes behind urban transformation. In Singapore, urban form making follows a top-down planning control system. In the 1990s, a new downtown plan was proposed at the reclaimed land, Marina South, using the concepts of through-block linkages, all weather comfort and separated multimodal pedestrian and transportation circulation. The ambitious plan is supported by the three tiers of Singapore's urban planning system from the island-wide conceptual plan, district-wide land use plan to the site specific urban design guidelines. In the Kaohsiung City central area, we observe a different urban pattern of street networks, block systems and building types generated through an evolutionary process of urban growth from the north to the south over a few decades. At almost the same period, a new business center was proposed on a piece of large-scale industrial land along the waterfront near the existing central area. A relatively loose spatial and regulatory framework was provided in Kaohsiung, where an incremental process was adopted for dealing with the multiple and complex landholdings on the new waterfront business center. A recent governmental-initiated planning mechanism of "community architect" plays a certain role in the process through participation. The article finally raises the issue of participation in the shaping of better environment in the Asian urban context. The two Asian

models of planning provide some bases for discussing the fundamental questions of the participatory approach.

INTRODUCTION: A BACKGROUND OF TWO ASIAN DOWNTOWNS

Singapore New Downtown

In 1996, a new generation “New Downtown” on reclaimed land was proposed by the Singapore government with the policy intention to create a new downtown environment combining work, play and living in a single space in a planning area of 372 acres at Marina Bay (Singapore URA, 1996).



Figure 1. Aerial view of Marina South, 1997. (Source: Singapore URA)

According to the urban vision from Singapore’s government, the downtown at Marina Bay is planned as a “city-within-a-garden” and a “distinctive location for business, living, working and leisure, around-the-clock.” Envisioned as an extension of office development from the existing CBD at Shenton Way area, the area will be developed to provide prime office space for global business and financial institutions, which is to be complemented with a full range of residential, shopping, dining, cultural, and entertainment facilities for the provision of a total live-work-play environment (Singapore URA, 1996). Different from the concept of traditional CBD planning such as the Shenton Way district, the area will offer a variety of housing near the waterfront and parks with all the city’s attractions and conveniences close at hand. The unique location of the new Downtown provides the opportunity to expand the existing uses within the CBD and Marina Centre to accommodate the future growth of the city. Around 50 hectares of land in Marina South, immediately adjacent to the existing CBD, has been set aside for the expansion of the existing CBD. With gross plot ratios between 9.0 and 15.0, it could accommodate up to 6 million sqm of space when fully developed, almost twice the size of the existing CBD today. The New Downtown thus has the capacity to meet the demand for office space over the next 50 years (Singapore URA, 2002).

Kaohsiung Multi-Functional Commerce & Trade Park

As the most important industrial and port city of Taiwan, Kaohsiung has been facing radical restructuring of the traditional industrial sectors and the function of the port. The manufacturing-based industries kept moving out for more than a decade. The world ranking of the Kaohsiung Port has dropped from 1990’s top 3 to 2002’s top 5 as one of the world’s busiest trans-shipment centers. Containerization is changing the infrastructure of the Kaohsiung Port and relocating the new port area to the south, which released a large-scale derelict port and industrial land near the existing city center. The changing industrial sectors and the regional competition among major Asian ports have forced the city to adjust its economic as well as physical urban structure. In 1995, a national urban policy responded to the situation, in which Kaohsiung was chosen to be the site of manufacturing and sea trans-shipment center as the Asia-Pacific Regional Operations Center (APROC). The previous port and industrial land along the waterfront was designated as a new city center namely the Kaohsiung Multi-Functional Commerce & Trade Park (KMFCT Park), which aims at redeveloping Kaohsiung’s old port area into a hub with multiple functions of financial, commercial, global logistics, trans-shipment and other related services.

The KMFCT Park is composed of three major functional zones:

- 1) The Cultural & Leisure Zone: A 77 hectare old port area is to be redeveloped into a waterfront commercial and recreational zone, which will provide citizens with high quality public open space and help promote the city’s tourism and commercial development.
- 2) Commercial & Trading Special Zone: For moving Kaohsiung from a traditionally industrial city to a global port city, a district of 210 hectares is planned as a financial and business district, including significant office and commercial development, international convention center, an international Expo Center and other facilities.
- 3) Warehousing & Trans-shipment Special Zone: This 300 hectare district is used as a center of product distribution, high-tech processing and manufacturing, which will stimulate international investment and promote domestic business development in Kaohsiung. As a center of re-export, the district undergoes a value-added process and provides a place to re-process, manufacture and re-export containers during the trans-shipment.

As a new city center, the port and industrial-based component remains one of the key generators of urban growth, where the goal of the KMFCT Park is to target attracting 40% of the three million trans-shipment containers of the Kaohsiung Port to operate at the new city district in the vicinity of Kaohsiung

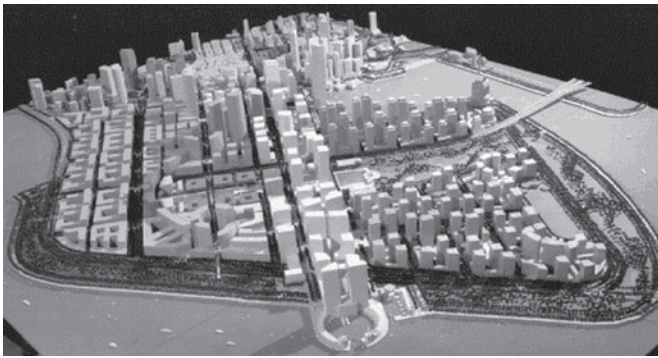


Figure 2. The Aerial view of Marina South Model. (Source: Singapore URA)

City. Through the composition of the three functional zones, the KMFCT Park is expected to attract international and domestic investment to the city. Initiated by the City Government of Kaohsiung, the plan of new city center aims at transforming Kaohsiung into an advanced global port city of the 21st century in the Asia Pacific Rim.

TWO ASIAN PLANNING SYSTEMS

Singapore Planning System - the Three-Tiers Urban Planning and Design Control

In Singapore, the shaping of physical urban space is highly influenced by a top-down government-initiated system, which is composed of three tiers of planning and design control namely an island-wide conceptual plan, district-wide development guide plan, and the site specific urban design guidelines. As one of the most influential planning authorities, Singapore Urban Redevelopment Authority (URA) has incredible capacity in the preparation of planning policy, land use planning and urban design guidelines in different spatial scales. The overall planning concept of the whole island decides land use policy and development strategy in a broad perspective. The district-wide development guide plan gives planning parameters such as population growth, development area, land use, gross plot ratio, infrastructure and the framework of public open space. The specific urban design guideline in the so-called sale of site provided detailed design control covering gross floor area, the uses on the first story and other key stories, building height, setback and bulk control, which constitute the essential urban physical quality, urban form, streetscape, roofscape, pedestrian network and vehicular system for the specific land to be released by government.

Island-Wide Conceptual Plan

The upper tier of Singapore's planning system, the Concept Plan, comprises the strategic planning and land use policy with the long-term vision of the physical development of Singapore. There have been several revisions of the concept plans since 1971, 1991, and 2001 and recently a new plan is to be re-

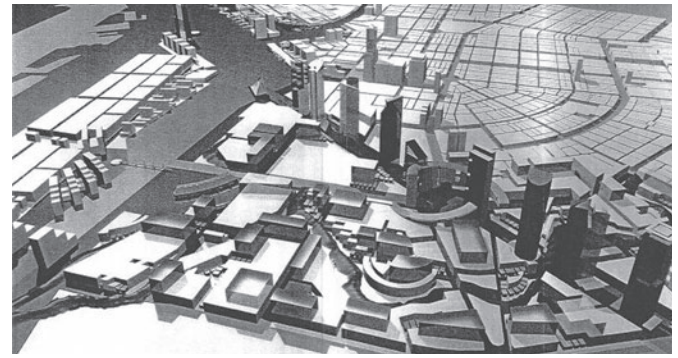


Figure 3. Aerial View of the KMFCT Park Master Plan. (Source: Kaohsiung City Government, Arte Jean-Marie Charpentier)

viewed in 2005. In the 1991 Concept Plan, the idea of developing a new downtown at Marina Bay area was proposed. In the Concept Plan of 2001, the new blueprint projected a scenario of a 5.5 million population for the next 40 to 50 years (Singapore URA, 2001). Throughout these three concept plans over three decades, we observed how the national urban policy responded to the challenges and different situations based on limited natural resources and the scarcity of land.

The Concept Plan of 2001 includes initiatives to be flexible and responsive to the needs of businesses, to support value-added industries and to provide for the growth of Singapore into an international business hub. For the vision of new city living, the Concept Plan aims to create a more livable city, one where Singaporeans can live comfortably, with a wide choice of housing locations and housing types. The business section mentions that the vision is for Singapore to be an economically vibrant city, a city driven by cutting-edge technology, high value-added industries and services, a global financial centre with strong infrastructure. While for recreation, the plan aims for turning Singapore into a fun and exciting city by providing places for enjoyment (Singapore URA, 2001b). In this island-wide con-

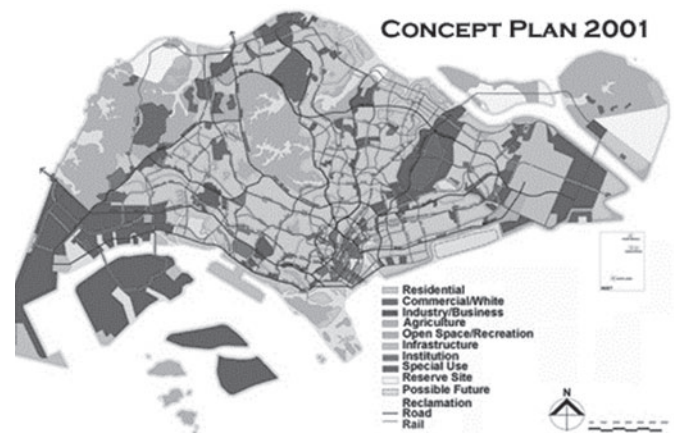


Figure 4. Concept Plan 2001 of Singapore. (Source: Singapore URA)

ceptual plan, the New Downtown at the reclaimed land of Marina Bay is the key proposal for integrating the live, work and play components. It will help reinforce or enhance Singapore's "business competitiveness and strengthen Singapore's status as a global and financial international business hub" (Singapore URA, 1997). The Concept Plan 2001 captures the vision of Singapore in the new century. The broad directions set out in the plan will be translated into more detailed plans as part of the review of the Master Plan 2003 (Singapore URA, 2001).

District-Wide Development Guide Plan

The broad strategies and policies in the Concept Plan are realized in detailed planning parameters through Development Guide Plans (DGPs), a lower tier of the planning control system. DGPs are essentially statutory local plans that contain details such as land-use zones, development intensity, transportation networks, open space and recreational areas and conservation designations that guide land development in a demarcated area. Singapore is currently divided into 55 planning areas. For each of these areas, a DGP was prepared where the broad strategies contained in the Concept Plan were translated into operational details at the local level. As each DGP was completed, it became the reference for development control and provided guidelines to landowners and developers on the type of use to which their land could be applied (URA, 1991a).

The District-wide plan is also called the master plan, which is reviewed every five years, most recently in the Master Plan of 1998 and 2003. It is a comprehensive review of land use, plot ratio and building heights. In the case of the DGP at Marina South, the planning parameters such as site area, land use, gross plot ratio, gross floor area, uses on the first story, outdoor

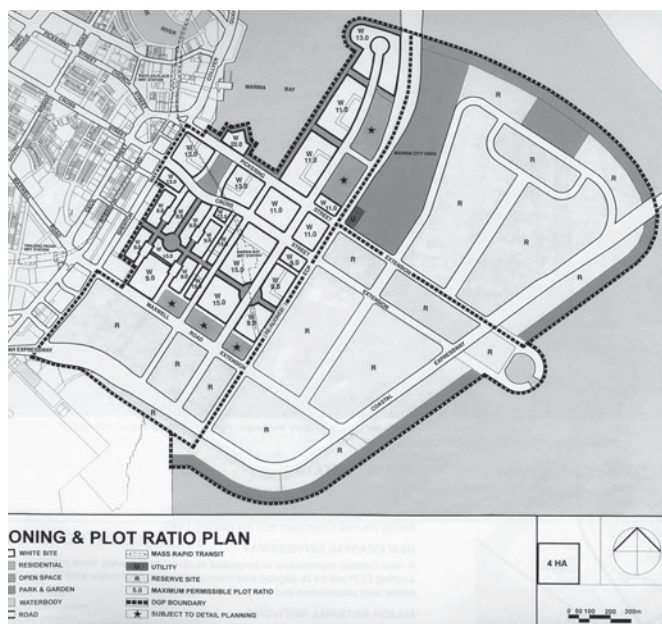


Figure 5. Land Use Zoning and Plot Ratio, Marina South 1997. (Source: Singapore URA)

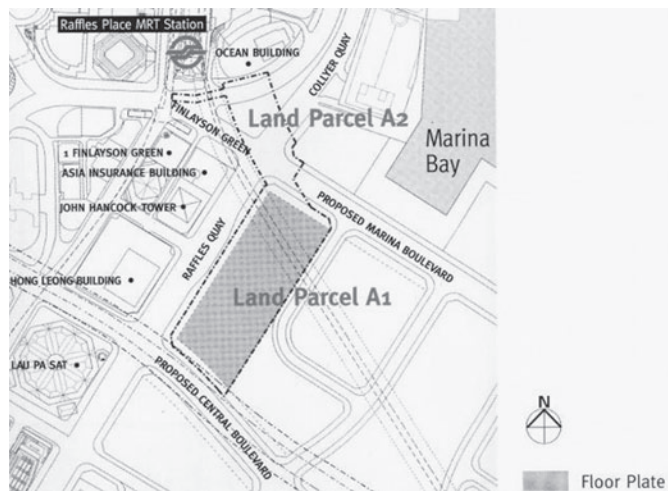


Figure 6. The map in Sale of Sites at Marina Boulevard, 2001. (Source: Singapore URA)

uses, building height and building setback are designated. The objectives of the master plan are specified as concepts such as a new leisure environment, all weather comfort, car-free pedestrian routes, and multi-means transportation systems.

Following the district-wide planning, more detailed design guidelines are sometimes implemented at certain strategic land parcels owned by the government, in which the planning authority URA usually invites tenders for the design and development of the specific site. The third tier design control is incorporated in a public-private development mechanism called "sale of site," in which some mandatory regulations and design guidelines are listed by URA. The successful tenders shall submit to URA and other authorities for their approval with full and complete plans, elevations and specifications of the development. Figure 6 shows an example of sale of site at the new downtown at Marina South. It is comprised by two parts namely Land Parcel A1 and Land Parcel A2. The proposed development is designated as the uses of commercial, residential and hotel mainly on parcel A1. In addition, the developer has to incorporate parcel A2 including a car park station and an underground pedestrian mall, which is traditionally a public space or facility (Singapore URA, 2001). The example shows how the relationship between public and private sectors are set through a particular development mechanism. The detailed urban design guidelines are clearly stated in the sale of site document through the land parcel plan, urban design conditions in the general plan and plans of key levels such as the basement, 1st story and 2nd story plans and other design guidelines, such as envelope control.

Kaohsiung Planning System – A Mixture of Traditional Zoning and Planning Permission

Compared with Singapore, Kaohsiung's governmental planning has relatively less control or influence on the formation of

the physical urban environment, where different stakeholders of private sectors and informal sectors play significant roles in planning and development processes. The mechanism of planning decision-making of Kaohsiung has a similar three-tier structure, comprehensive development planning, urban land use plan and urban design review, which are comparable to the 3-tier planning system in Singapore. Recently, at the policy level, some social expectations and political agendas from the government and local community envision Kaohsiung to be an “Ocean Capital,” “Cultural Kaohsiung” or “Southern New World.” However, they are not well articulated to the three tiers of the planning system. For the policy and strategic planning of the whole city, there are varieties of plans including comprehensive development plans, economic and development strategies, urban landscape planning and urban design policy. Most of them rest on ideas only and lack tools of enforcement or specific practical guidelines. Although the comprehensive development plan of Kaohsiung is like the concept plan of Singapore in terms of the level of planning, its connection to the urban land use plan is not clear. At the second tier, the urban land use plan provides zoning and floor area ratio (plot ratio) based on blocks and districts, which is comparable to Singapore’s district-based development guide plan. For the urban design control, Kaohsiung doesn’t have the similar mechanism as Singapore’s sale of site. The urban design control goes to a procedure of design review, which is closer to the system of discretionary permission in the UK.

Comprehensive Development Plan

The comprehensive development plan of Kaohsiung is a policy oriented strategic plan for urban growth and development strategies. It plays a key role in the facilitation of urban infrastructure and future development under governmental administration. Along with the other policy planning such as the plan to promote Kaohsiung to be the Asia-Pacific Regional Operations Center (APROC), it bears directly on the crucial task of creating a better living environment for Kaohsiung. It ensures the equitability of land development, which means that different regions have their fair share of development opportunities, fair allocation of resources, and fair slice of development profits, as well as bearing a fair portion of the costs. It emphasizes sustainable development across all sectors from urban development to building transportation infrastructure to nature conservation etc. The plan implements decision-making at the local level with the involvement and participation of key agencies and aims at adjusting the spatial structure of land and the making of a greater efficiency of land use.

Urban Land Use Plan

The second tier of the Kaohsiung planning system is the urban land use plan, which aims at providing land use, zoning and floor area ratio for the management of urban land develop-

ment. The urban land use plan is reviewed every five years and managed by the urban planning committee and supervised by an upper-level committee in central government. According to the Kaohsiung Urban Land Use Plan, the land use character of each parcel is defined by a few land use categories, namely residential, commercial, industrial, cultural, public space, utility, transportation uses etc. There are other sub-categories under each main land use, which provide detailed information on uses and intensity for guiding individual development.

For the KMFCT Park, the whole area is divided into three functional zones: The Cultural & Leisure Zone, Commercial & Trading Special Zone and Warehousing & Trans-shipment Special Zone have been subdivided into parcel systems with allowed land uses, intensity, infrastructure, public space and suggested potential development programs. Compared with the existing fine-grain urban blocks and districts, the parcelization within the three functional zones is much coarser in the KMFCT Park, which was obviously affected by the existing ownership situation. The coarse-grain parcelization also implies that the future development of the KMFCT is still very uncertain. It lacks clear urban visions as well as external forces to trigger the development.



Figure 7. Land Use Plan of the KMFCT Park. (Source: The Bureau of Public Works, Kaohsiung City Government)

Urban Design Review

Compared with Singapore’s development mechanism through the sale-of site system, the urban design control in Kaohsiung relies upon the mechanism of design review, which is closer to the planning system of discretionary permission in the UK. Under this system, the review procedure of permission is usually applied to planning, development, and construction processes. Under a similar mechanism, Kaohsiung’s urban design control is conducted in the designated “special district” such as the KMFCT Park through the urban design review process carried

are released on short term leases for temporary uses such as 'barbecue-steamboat coffee-shops', a pool hall, two bowling centers and a mix of small shops. For some strategic locations along the waterfront promontory area, some midterm programs such as commercial, entertainment and cultural facilities were recently initiated or have been envisioned for a period of 30 years. At the same time, a few parcels closer to the existing CBD areas are released for longer-term development programs such as office, high-rise urban housing and mixed-used development based on the lease period of 99 years. Through the mechanism of sale of site, the planning agency can execute regulations and guidelines and manage the long-term urban change according to urban policy and the market situation.

In Kaohsiung KMFCT Park, the ownership distribution is limited to a few major stakeholders like the Port Authority, the Ministry of Economic Affairs, military institutes, state-owned companies and Kaohsiung City because the land has been used mainly for industrial and port function. Within the 587 ha, almost 80% of the land is owned by the state or state-related enterprises and the remaining 20% of land parcels go to very few private enterprises. Most of the land in the KMFCT Park originally belonged to Qian-Zhen, Kaohsiung export processing zones, Middle-Island commercial port zone, and the commercial zones of Pong-Lai, Yan-Cheng, and Ling-Ya. The separation of land sovereignty, jurisdiction and the management of the land among city, port and other governmental authorities makes the direct operation of planning power difficult, which requires certain mechanisms of consensus building and integration among those stakeholders. Until 2002, the development of KMFCT Park has seen no significant progress except TaiSugar Logistics Park and Software Technology Park belonging to Kaohsiung export processing zones.

Regulations and Incentives

Although regulations and incentives play a key role of planning control in both Singapore and Kaohsiung, they are organized in a very different form and context. In Singapore, the regulatory enforcement of urban land use is clearly articulated with the upper-tier conceptual planning and the lower-level design guidelines through a 'sale of site' mechanism. The recently released sale of site of "White Site Development/ Financial and Business District" in 2001 and "Business and Financial Center (BFC) at Marina Bay" in 2004 are perfect examples to show how the governmental tools of regulation and incentive are implemented. To insure the feasibility and flexibility of the early development at Marina South, the 2001 White Site Development plan cited a new concept called "white zone," a new zone with the flexibility of mixed uses of commercial, hotel or residential, for attracting the master developer to achieve a well-integrated development that will meet all the needs of

out by the Kaohsiung Urban Design Review Committee. The committee examines the aspects of urban design quality, form control and urban landscape from the proposals within the special district. If there is any revision of the urban land use and development intensity, the plan has to be submitted to the upper-level Urban Planning Committee and get their approval, in which the Urban Design Review Committee can not authorize the urban land use changes. The dual mechanism shows that the Kaohsiung urban design control is only partially the system of discretionary permission like the UK. It also is subject to the typical urban land use and zoning system. Table 1 shows how complicated the review processes of urban design and land development are, which is juxtaposed with the control of the upper-tier urban land use plan.

GOVERNMENTAL TOOLS OF THE TWO ASIAN PLANNING MODELS

In Singapore and Kaohsiung, we have observed two governmental actions and responses to new economic challenges and global city competition through major urban interventions, the New Downtown in Singapore and the Multi-Functional Commerce and Trade Park in Kaohsiung in the 1990s. As one of the key driving forces, how does governmental planning help manage these urban changes? Upon the two very different urban scenarios, what are the planning mechanisms, planning systems and planning processes behind the scenes of urban transformation? Furthermore, what kind of planning tools could the government use for implementing the urban design and planning policies?

Schuster argued that there are five and only five tools that governments can use to take action for the shaping of the urban physical environment. These are ownership and operation, regulation, incentives and disincentives, enforcement of property rights and information. The five tools of governmental actions, however, are constrained in the world of action by politics, economics, and preexisting social relationships and institutional structures (Schuster & de Monchaux, 1997). As a temporary framework, the hypothetical concepts are applied here for the comparison of the two planning systems in Asia. It is a useful framework and we will argue later that the temporary framework of five tools is not sufficient for explaining the two Asian experiences.

Ownership, Direct Operation and Property Right

The most direct tool of governmental planning is ownership and operation, where the state can implement policy through direct provision by owning and operating resources (Schuster & de Monchaux, 1997). In the case of Singapore, the fact that more than 70% of the land belongs to the state shows that the government has the dominant ownership and direct operation over the future uses of the land. The land ownership in Kaohsi-

ung is much more fragmented, decentralized and complicated. It can be observed from the fine-grain city fabric and the types of uses in the existing city.

In Singapore’s Marina South, a reclaimed land mainly owned by the state, the government has the direct control and operation of when, how and what type of development should be implemented. At the early stage of development, some parcels

modern businesses. In 2004, the BFC project, the largest URA sale of site project after Suntec City was released on a 3.55 ha waterfront site together with adjoining 1.8 ha of subterranean space with the potential development capacity up to 438,000 sqm gross floor area (GFA). A minimum 60% of the GFA for offices is stipulated to ensure that the strategic objective of the BFC will be achieved. The remaining space can be put to other

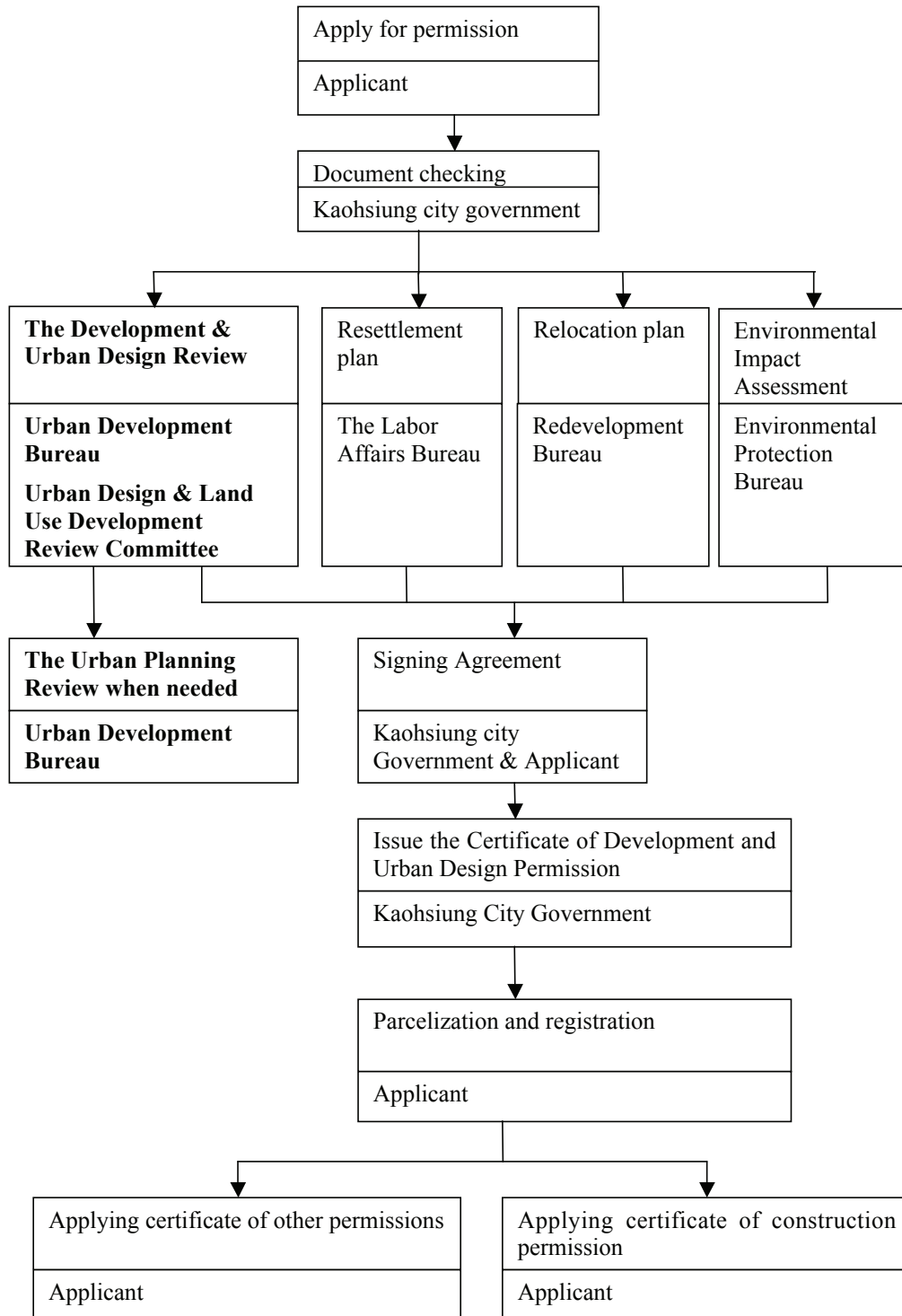


Table 1. The review procedure of development and urban design permission in Kaohsiung. (Source: Urban Development Bureau, Kaohsiung City Government)

commercial uses as well as complementary hotel, residential, entertainment and recreational uses (Singapore URA, 2004). Through the clear planning regulations and urban design guidelines, the plan still provides certain flexibility in land uses as a form of incentive for development of the specific site.

Without the single-track and systematic procedure of Singapore, the governmental tool of regulation and incentive in Kaohsiung appears to be more complicated but more negotiable through the design and development review procedure. In the example of the Kaohsiung World Trade Center project, we observed that the regulatory planning parameters are applied to a situation with multiple stakeholders, where government plays a role of both gate keeper and incentive provider through setting up a series of “reward regulations” for stimulating investment and development. In this case, the priority was set by city government for reviewing each development proposal through urban design review and development review for permission. The priority will go to those land owners, who have intentions to develop their land under the plan of Kaohsiung World Trade Center or to donate land for public uses. The mode of BOT (build-operate-transfer) is encouraged. A series of reward regulations was adopted for attracting investors and enterprises to participate the development of KMFCT Park. For example:

- After completion of development, the landlord who obtained the land for the first time and applies for a construction permit within one year of his registration will enjoy a 25% F.A.R. bonus of the planned volume. Otherwise, the F.A.R. bonus will be reduced 5% each year. By the fifth year, the landowner shall start his construction, or there will be no F.A.R. bonus and the landowner will have to reapply for it.
- For stimulating the initiation of development, the F.A.R. bonus application is based on a “first come, first served” basis with a limitation on the total amount. When the F.A.R. bonus has reached 115% of the total F.A.R. amount, no more bonuses will be given.
- The applicant who combines two or more parcels or blocks to one development site can apply the Transfer Development Right (TDR) mechanism to calculate his total development, and qualifies to apply the F.A.R. Bonus.
- When applying for a construction permit according to the F.A.R. reward regulations, the developer should conduct a traffic impact analysis and offer a proposal for solutions.

The criteria or the reward regulation is implemented based on a process of design and development reviews, in which the regulatory planning parameters are used as a form of incentive for stimulating the development.

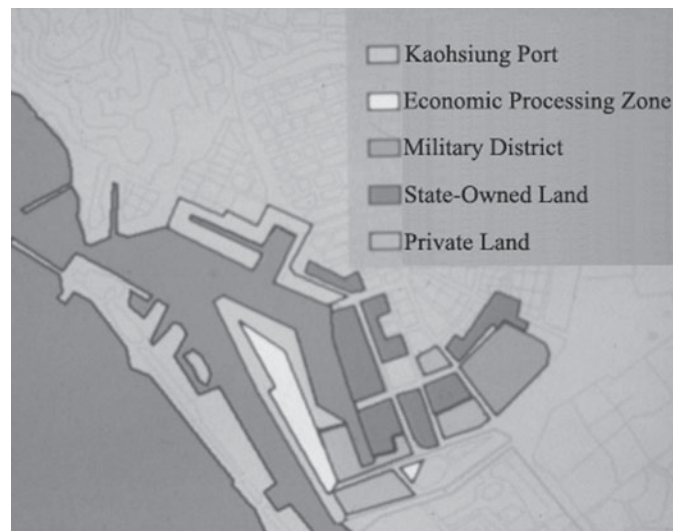


Figure 8. Land jurisdiction and ownership distribution in the KMFCT Park. (Source: The Bureau of Public Works, Kaohsiung City Government)

Information and Participation

Besides the governmental tools on ownership, property rights, regulations and incentives, the collection and delivery of planning information is another key aspect of governmental intervention to help shape the physical urban environment. The aspect of planning participation shows very different pictures in Singapore and Kaohsiung in terms of the mechanism of participation and the degree of involvement from citizens.

In Singapore, the information giving and consultation was usually done when a new concept plan, master plan or urban design plan was proposed. The planning authority URA usually exhibits the plans in URA Exhibition Hall or the community center to get feedback from the public. In the example of the New Downtown Plan at Marina Bay, the exhibition attracted more



Figure 9. The sale of site “Business and Financial Center (BFC) at Marina Bay” 2004. (Source: Singapore URA)

Figure 10. The exhibition ceremony of City Center, 2003. (Source: Singapore URA)

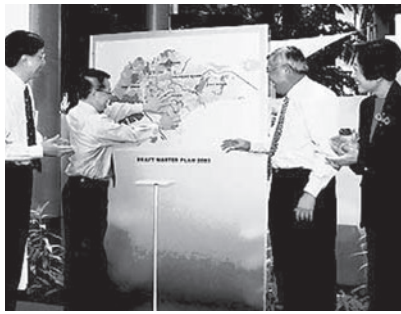


Figure 11. Exhibition of Draft Concept Plan 2001. (Source: Singapore URA)



Figure 12. Symposium held by URA 2000. (Source: Singapore URA)



than 12,000 visitors (including about 6,500 online visitors) in less than three weeks since the opening of the exhibition on June 26, 2003. The exhibition was prolonged to five weeks and had a total amount of 18,000 visitors. General interest from the public is high but the feedback mechanism shows a relatively passive way of participation.

In addition, public consultation was sometimes conducted through Focus Group discussions to obtain opinions from representatives of architectural, property and financial industry leaders. For example, the Minister of National Development launched the public consultation phase for the Concept Plan 2001 with two focus groups on land allocation and identity is-

issues in 2000. Two issues were studied on balancing Singapore's scarce land resources among the competing land uses of housing, parks, industries, and how to retain identity in the context of the intensive use of land. Initiated by government, the two focus groups comprise professionals, interest groups, industrialists, businessmen, academics, grassroots organizations and students. Their proposals were formulated through interaction with various governmental agencies, site visits and a public forum with the public. Some of the recommendations from the focus groups were incorporated into the Draft Concept Plan 2001 (Singapore, URA 2001).

In Kaohsiung, the involvement of grassroots or citizen groups seems more active through creative opportunities and channels. The recently built mechanism of "community planner" and "community architect" encourage direct participation and communication in urban and community affairs and the creation of public spaces.

The idea of directly involving participants, citizens and the local community in the decision making process was introduced to Taiwan in the context of social and institutional change in the early 1990s. Community planners or architects are expected to play key roles in mediating different social interests and values among social and citizen groups. The community architect or planner is not only the professional planner or designer for the community space, but also the consensus builder of the community. The system of "community architect" and "community planner" was started in Kaohsiung in 2002 from the establishment of the first community architect's studio in Ling-Ya. It was initiated by the Kaohsiung City Government and the first "community architect" system was introduced here to encourage local architects to help improve the urban environment of Kaohsiung (Dialogue Architecture, 2002). Compared with other cities and counties in Taiwan, the quality of space making seems more emphasized in Kaohsiung and the evidence is shown in various urban and public architecture projects initiated by the new system recently.

Five governmental tools	The characters of the tools	Singapore	Kaohsiung
Ownership and operation	The state will do X	***	*
Regulation	You must (or must not) do X	***	**
Incentives /Disincentives	If you do X, the state will do Y	*	**
Establishment, allocation, and enforcement of property right	You have a right to do X, and the state will enforce that right	*	***
Information and participation	"You should do X," or "You need to know Y in order to do X."	**	***

Table 2. The degree of effectiveness of the five governmental tools: ***Strong, **Medium, *Weak. (revised from Schuster & de Monchaux, 1997)

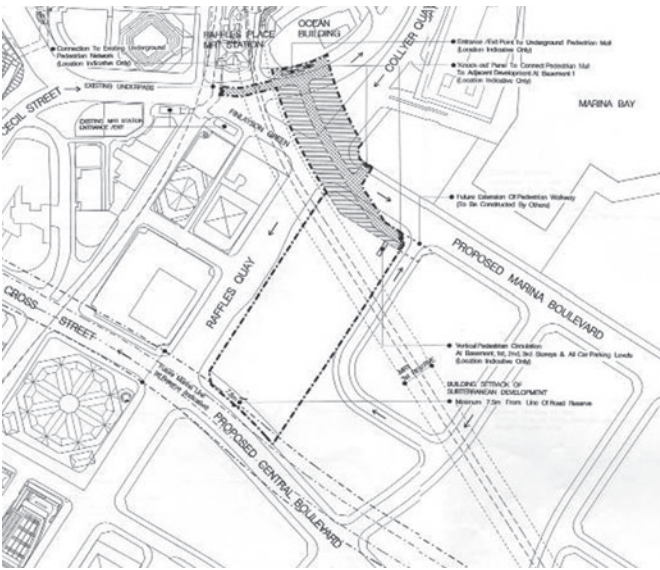


Figure 13a. Urban design guideline-envelope control. (Source: Singapore URA)

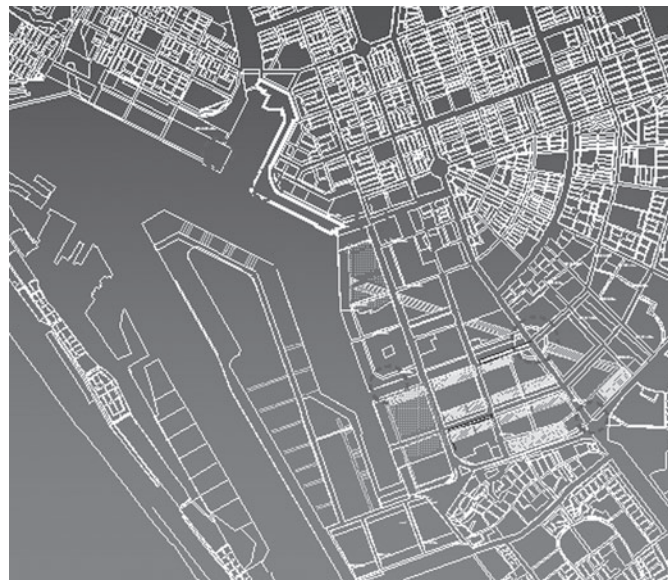


Figure 14. The framework of public open space. (Source: Urban Development Bureau, Kaohsiung City Government)

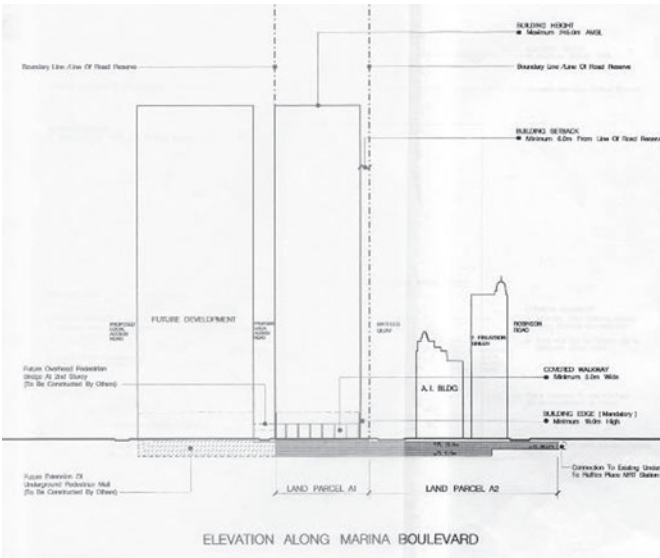


Figure 13b. Urban design guideline-envelope control. (Source: Singapore URA)

Design Guidelines

From Table 2, we have summarized the effectiveness of the five governmental tools based on the experiences of the Singapore and Kaohsiung planning systems. The evaluation of the degree of effectiveness of the different governmental tools is debatable, and needs to be verified through more evidence.

However, there is one key aspect that is missing in Schuster's proposition regarding the assessment of potential governmental tools. The design guidelines, a technical aspect of urban form and urban quality control, have significant influences on the shaping of the physical urban environment. Although they

are both related to the directional operation of government and the aspects of regulations, we have found some fundamental differences in the lower-tier urban design control between the two cities.

Singapore's design guidelines focus heavily on physical guidelines, which are implemented through the particular development mechanism of sale-of-site. At this level, URA provides more detailed guidelines from the location plan, site plan, land parcel plan to the urban design conditions plans such as the general plan, basement plan, 1st story plan, 2nd story plan and envelope control plan. So the guidelines range from urban form making to three-dimensional skyline control (Figure 13 & 14). It is a site specific guideline and the quality control of urban space is supported by a planning agency with a strong capacity for physical planning and urban design.

Kaohsiung's urban design control is relatively more flexible, general and policy oriented than Singapore's. Compared with the site-specific guidelines in Singapore, the design guidelines are conducted at a district-block level, which emphasizes more the general performance of the whole district and is not confined to how an individual site should perform in the specific site context. It appears on those designated special districts such as the KMFCT Park, where the urban design policy is proposed in the strategic planning, design competition or urban design master plan initiated by the Kaohsiung City Government. For some other districts where the master plan or detailed plan are still drafted as the traditional approach to land use planning, it is relatively unclear what the district-wide guidelines should be for controlling local environmental quality. Without the rigorous

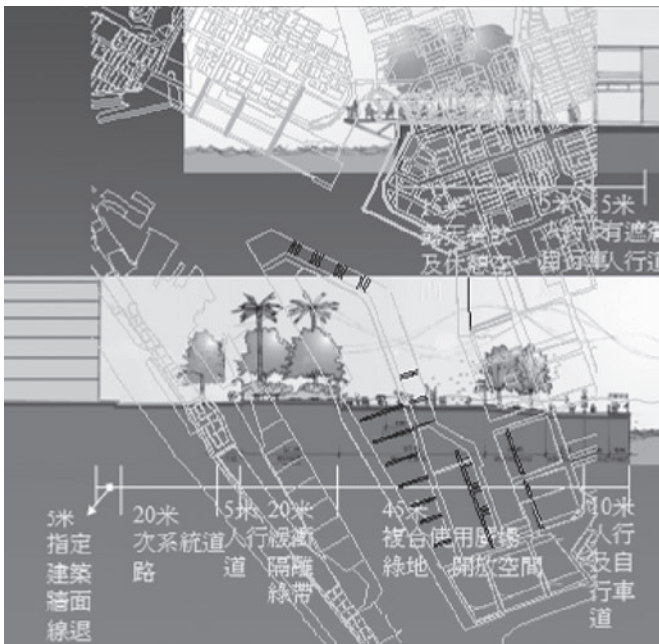


Figure 15. The guideline for public open space and landscape. (Source: Urban Development Bureau, Kaohsiung City Government)

urban design guideline as Singapore's sale-of-site mechanism, the urban design control in Kaohsiung relies upon the mechanism of urban design review.

CONCLUSION

The incredibly fast urban transformation of new city areas in Singapore's New Downtown and Kaohsiung's Multi-Functional Commerce & Trade Park are clear examples for analyzing the two distinctive Asian planning systems. They are also good examples for us to rethink the institutional bases and cultural implications behind urban changes. Within the three-tier control of the two Asian planning systems, we have observed a more articulated system all the way from concept plan, master plan down to the site specific urban design guidelines in Singapore, where another three-tier system, an uncertain urban planning policy, a relatively rigid urban land use plan and a review-based urban design control was formulated in Kaohsiung.

In the experiences of Singapore and Kaohsiung, we found that the mechanism of planning decisions and implementation are not usually made in a pure form as the five governmental tools, ownership and operation, regulation, incentive, property rights and information, proposed by Schuster and de Monchaux. They are sometimes performed as the hybrid of a few different tools or sometimes emphasize one particular aspect of planning tools with more delicate contents. To understand these two Asian models of planning decision making, we have made use of the five hypothetical categories as the preliminary framework for examining their differences and similarities. We

also argue that the five tools are not sufficient for explaining the Asian experiences. Some hybrid form of governmental tools such as the participatory oriented approach and the design review process in Kaohsiung and the delicate contents of urban design guidelines in Singapore have made the quality of urban design decision-making different in their particular urban contexts.

REFERENCES

- Dialogue Architecture. 2002. *Architecture & Political Ideology / Southern Dimensions –Kaohsiung*. Dialogue Architecture+Design+Culture, Taipei: Meizhao Culture Enterprise Co. Ltd.
- Kaohsiung BPW. 2003. *The Briefing Of Design Of Xingguang Quay*, Kaohsiung: The New Construction Department, Bureau of Public Works Kaohsiung City Government.
- Kaohsiung BPW. 2003. *Vision for Kaohsiung*, Kaohsiung: The Bureau of Public Works Kaohsiung City Government.
- Kaohsiung BPW. 2002. *The Future Blueprint of Kaohsiung*, Kaohsiung: The Bureau of Public Works Kaohsiung City Government.
- Kaohsiung BPW. 2002. *Remaking Kaohsiung in Asia*: The Bureau of Public Works Kaohsiung City Government.
- Kaohsiung BPW. 1999. *Kaohsiung Maritime Trade Centre and Commerce Park Special District Urban Design Project*, Kaohsiung: OMA Asia.
- Kaohsiung BPW. 1999. *Kaohsiung Harbor Maritime Trade Centre & Commerce Park*, Kaohsiung: EDAA.
- Kaohsiung BPW. 1999. *City Concept Design*, Kaohsiung: ARTE Jean-Marie Charpentier.
- Kaohsiung BPW. 1998. *The Planning Act for Kaohsiung Global Development Strategy*, Kaohsiung: The Urban Development Department of Bureau of Public Works Kaohsiung City Government.
- Kaohsiung BPW, Senhai International Construction Consultive Co. Ltd., Dinghan International Construction Consultive Co. Ltd.. 1995. *Kaohsiung Multi-functional Commerce & Trade Park Comprehensive Plan and Rezoning*, Kaohsiung: The Bureau of Public Works Kaohsiung City Government.
- Kaohsiung City Government. 1999. *Kaohsiung Waterfront 2020 Urban Design Symposium*, Kaohsiung: Kaohsiung City Government.
- Kaohsiung City Government. 1996. *The Plan Of The Research On The Early Stage Of Developing Kaohsiung Into Asia-Pacific Regional Operations Center*, Kaohsiung: Kaohsiung City Government.
- Kaohsiung Harbor Bureau, M.O.T.C. 2003. *Port of Kaohsiung 2003*, Kaohsiung: Kaohsiung Harbor Bureau.
- Lin Q R. 1995. *Urban Design in Cities of Taiwan*, Taipei: Chuangxing Press Co. Ltd.
- Schuster, J M, de Monchaux J, Riley, C A. 1997. *Preserving the Built Heritage: Tools for Implementation*. Hanover, NH: University Press of New England.
- Singapore URA. 2004. *Business Financial Centre Site Released for Sale on Reserve List*. Skyline, May/June, 2004, Singapore: Urban Redevelopment Authority.
- Singapore URA. 2003. *Downtown at Marina Bay*, Singapore: Urban Redevelopment Authority.
- Singapore URA. 2003. *Ideas for a great city centre draw more than*

18,000 visitors. Skyline. Singapore: Urban Redevelopment Authority.

Singapore URA. 2001a. Skylines: Draft Concept Plan 2001, Singapore: Urban Redevelopment Authority.

Singapore URA. 2001b. The Concept Plan 2001, Singapore: Urban Redevelopment Authority.

Singapore URA. 1997. Annual Report 1996/1997, Singapore: Urban Redevelopment Authority.

Singapore URA. 1996. New Downtown: Ideas for the City of Tomorrow, Singapore: Urban Redevelopment Authority.

Singapore URA. 1991. Living the Next Lap: Toward a Tropical City of Excellence, Singapore: Urban Redevelopment Authority.

Tan S. 1999. Home, Work, Play, Singapore: Urban Redevelopment Authority.