

IN THE NAME OF UTOPIA,
THE CASE STUDY OF PUTRAJAYA, MALAYSIA'S PLANNED ADMINISTRATIVE
CAPITAL

By
LEVU 'VINCENT' TRAN

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To my wife Van-Anh; and to my sons, Dzuy and Khoi

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LIST OF ABBREVIATIONS AND GLOSSARY

ASEAN	Association of Southeast Asian Nations
Bangsa	Malay for nationality and/or race
Bumiputera	(also spelled Bumiputra) the term associate with the ethnic group of Malays and indigenous peoples; literally mean sons of the soil.
CMP	(also MCP) the Communist Party of Malaya
Dataran	square, place
ERL	(also called KLIA Ekspres) Express rail Link, the high speed train connecting Kuala Lumpur, Putrajaya and Kuala Lumpur International Airport
FDI	Foreign direct investment
FMS	Federated Malay States
GDP	gross domestic product
ICT	Information and communication technology
IT	Information technology
Jalan	Malay for road, street
Kampung	Traditional Malay urban settlement
KL	Kuala Lumpur
KLCC	Kuala Lumpur City Center
KLIA	Kuala Lumpur International Airport
LRT	Light Rail Transit system
MCA	Malay(si)an Chinese Association
MAVCAP	The Malaysian Venture Capital Management
Malay	the term for the Malay race (Malayu) in Malaysia, and their language

Malaya	Former name of Malaysia
Malayu	see Malay
MCP	Malayan Communist Party
Merdeka	Independence
Meleka	Also Malacca, a prominent city/state of Malaysia
Menara	tower
MDC	Multimedia development Corporation
MIC	Malay(si)an Indian Congress
MIMOS	Malaysian Institute of Micro-electric Systems
MSC	Multimedia Super Corridor
NDP	Natioal Development Policy
NEP	New Economic Policy
Orang Asli	original people, typically the aborigines of the inland jungles
Petronas	Petroliaam Nasional Bhd (National Petroleum Corporation)
PM	Prime Minister
PNB	Permodalan Nasional Bhd (National Investment Corporation)
PUTRA	Projek Usahasama Transit Ringan Automatik (LRT system)
RM	Malaysian Ringgit (national currency)
Sdn Bhd	Sendirian Berhad (Private Limited)
STAR	Sistem Transit Aliran Ringan Sdn Bhd (LRT system)
UMNO	United Malays National Organization
UTC	(French) <i>Temps Universel Coordonné</i> , Coordinated Universal Time

Abstract of Thesis Presented to the Graduate School
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Levu 'Vincent' Tran

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In 1991, Malaysia, under the leadership of its fourth Prime Minister Dr. Mahathir Mohamad, has embarked on an ambitious refashioning of the nation called Wawasan 2020 (Vision 2020) in pursuit of its goal of becoming a 'developed country' by the year 2020. Malaysia set out to build the new federal administrative capital, Putrajaya, to replace congested Kuala Lumpur as the government seat, the country nerve center to represent and to guide the 'new' Malaysia forward on this endeavor. The new administrative capital of Malaysia is located twenty five kilometers south of the current capital city Kuala Lumpur, and twenty kilometers north of the country new airport, the Kuala Lumpur International Airport- another highly acclaimed project undertaken by the Mahathir's Administration. Named in honor of Malaysia's first Prime Minister, Tunku Abdul Rahman Putra, Putrajaya also has another important meaning in Malay- the country main language, the 'glorious prince'. 'Putra' means 'prince' and 'Jaya', the common suffix for cities in Malaysia can be translated as 'successes' or 'victory'. Putrajaya is built not only to represent the new Malaysia in the era of globalization but also to demonstrate the country's determination to create a success model city. By establishing the new administrative center in a new site, the development of Putrajaya

has opportunities to create a well-planned urban center suitable for its intended function, as well as “to provide a more conducive and integrated working environment” (Perbadanan Putrajaya, 1999). Through the study of the planning and developing of the city, I attempt to evaluate its success based on its role, Administrative Capital.

CHAPTER 1. INTRODUCTION

Since the 1980s, Malaysia has gone aboard on the raging globalization.

Malaysia's global gateway, Kuala Lumpur, had grown at an unprecedented pace taking on the role as the country's principal commercial and financial hub. The rapid growth of the capital city had imposed a severe strain on infrastructure, housing and other urban amenities. The planning and building of the new administrative capital Putrajaya, the central premise of this thesis, is not only to respond to Kuala Lumpur's intensification, but also to release the city's federal administrative function. Prime Minister Mahathir Mohamad, seen by many as the "creator" of Malaysia's Administrative Capital, described Putrajaya as: "...a city that characterizes the spirit of Malaysia in its fullest senses in the 21st century...a city to symbolize the nation's aspirations." (Cited in Azizi, 2009, p. 1)

This thesis is an in-depth case study of Putrajaya to address the following challenges: 1) the questionable role as Malaysian government's power seat, 2) the problematic identity as national representation, and 3) the debatable design modeled after the "Garden City" concept.

The methodology used in this work is composed by: reviews on scholarly works on (administrative) capitals and available literature on Putrajaya; examination of its master-plan and implementation; and the field-studies of Putrajaya over the period of 2005-2008.

In the view of many Malaysians, Putrajaya which was planned, developed, and built entirely by the Malaysian is certainly one of its proudest achievements. It has been 16 years into the construction of Putrajaya, and the completion date is projected to be

2015. The final phase of Putrajaya is currently in the works, as the utopian expression of this new federal administration capital manifests well. However, despite being touted as the planned administrative capital to represent Malaysia in the new millennium, my studies show considerable challenges of the very premises of developing Putrajaya: establishing the nation's nerve center, a representation of national identity, and at certain level being the model "City in the Gardens".

CHAPTER 2. REVIEW OF LITERATURE

“The capital is by definition a seat of power and a place of decision-making processes that affect the lives and the future of the nation ruled, and that may influence trends and events beyond its borders. Capitals differ from other cities: the capital function secures strong and lasting centrality; it calls for a special hosting environment to provide what is required for the safe and efficient performance of the functions of government and decision-making characteristics of the place.” (Gottmann and Harper, 1990. Cited in Campbell (2002), p. 1)

The (Administrative) Capital: the Nerve of a Nation

The political vs. administrative roles of a capital city are relative to its significance and importance. “the size of government employment vs. private sector employment, the amount of city land devoted to government buildings, the form of the national government, its level of centralization, the economic-regulatory links between the public and private sectors, and the years that the city has hosted the national government” (Campbell, 2000, p. 1).

Of capital city types, at one end of the spectrum are cities such as London and Paris with proven track records as powerful national governments, former centers of colonial power, architecture manifesting hierarchy in urban regions. At the other end cities such as Montevideo and Jakarta are dominant cities but the national power is not dominant. Modest, administrative oriented capitals of powerful nations such as Ottawa, Canberra are somewhere in the middle of the spectrum. Then there are the hybrid capitals with contradictory characteristics that are peculiar to their nation's specific history and development, such as Berlin and Washington (Campbell, 2000). The

spectrum remains only to further complicate itself as globalization becomes common practice. In spite of these variations, capital cities are often understood as “spaces that represent center points of political power” (Shatkin, 2005, p. 577). Some national powers in a single, specific location were transformed from their historic royal seats, while others were the product of modern administrative decisions: Washington DC, Brasilia and Canberra are in this category.

Sutcliffe (1993) suggested the formation of capital cities through history: Late Middle Ages was a relatively simple state apparatus with the royal palace and its courts. Capital cities became the center of absolute royal authority around the 17th Century. This complexity resulted in the emerging of the four institutions in the modern capital cities: the state bureaucracy, the municipal government, organized religion, and the emerging business elite. The wide spread globalization in recent decades significantly intensifies this complexity, especially in Southeast Asia. Korff (1996) noted that “Southeast Asian capital cities have a high concentration of elites and a monopoly on the institutions of modernization” (as cited in Campbell, 2000, p. 1). With the concentration of elites and state organizations, the city becomes a hub for national planning and nation building. These historically derived features enable some of the Asian capital cities particularly powerful within the urban hierarchy. The concentration of power in the capital city has also meant that the symbolic and ideological dimensions of power are inscribed onto the built environment. As a consequence, “successive regimes have embarked on building projects to protect and extend their legitimacy and to give the fragmented nation some sense of identity and purpose” (Ho, 2005-06, p. 538). Due to the complexity of modern political power, capital cities are not just about

technocratic administration, but also about concentration, sustainability and ideological representation of power.

The Identity Factor of Capital Cities

One of the key functions of national capital is to be a “symbol of the nation identity and unity”....“this role is especially important in countries that are regionally or ethnically strongly divided” (Colombijn, 2005, p. 96). Scott Campbell (2000) suggested that capital cities are “symbolic theaters for national ideology”, “reflections of the larger national stance towards urbanism”, “a bridge between local culture and the ‘imagined community’ of the nation-state” (Campbell, 2000, p. 1). Capital cities today, whether emerged from the past or planned and built, often share same characteristics: “to represent the progress of a nation, serve as ceremonial stages to show up the power of the ruling elite, and as foundations upon which to build a nation identity” (Ho, 2005-2006, p. 359). Planned capital cities, especially those built after the 2nd World War often emerged after their respected countries achieved independences. Many of these capitals were built anew, as means disconnected with past regimes (or with colonial eras), and as statements introducing themselves to the world. On the subject of planned capital cities, Lawrence Vale (2008) stated: “the bold venture of capital city construction has been connected to the ruling elites’ attempts to consolidate national unity and cultivate national identity...[T]he design of an entire new capital city, government leaders have attempted to define a sense of national identity by careful manipulation of the built environment”. Planned capital cities are different from traditional ones. Planned capitals are often built with clear strategies governed by comprehensive master-plans; they provide opportunities to set up urban areas reflecting as well as emphasizing national identities.

The Garden Cities Concept

Lewis Mumford acclaimed 'Garden Cities of Tomorrow' has done more than any other single book to guide the modern city planning movement and to alter its objectives (as quoted in Fishman, 2005, p. 31). Ebenezer Howard's garden city concept still influences city planners today for his utopian visions of a total environment in which man would live in peace and harmony with nature.

Howard, and subsequently Frank Lloyd Wright and Le Corbusier- twentieth century's most vocal urban utopia promoter, "was not interested in making existing cities more profitable or in building 'model' tenements to replace old ones" (Fishman, 2005, 29). He envisioned the building of new city and developed detail frameworks accordingly from depopulated agricultural lands. Howard's physical plans for the garden city are well known: "The city is conceived, like many utopias, on a circular basis and there is a clear zoning system within it. Service activities and public buildings are at the center with a belt of residential land around them" (Aalen, 1992, p.29). One important character of Howard's concepts is the comprehensive planning of the city to be planned to the minutest detail, from the core civic area to the boundaries enclosing the city. Public garden, parks and tree-lined avenues are prominent features. Howard's city in the garden remains a diagrammatic vision, to be adjusted to particular sites, and use as guidelines when addressing local architectural style.

Putrajaya: Location, Theme and Concept

The planning and developing of Putrajaya is a phenomenon in its own right. The country had waited forty years since its establishment (1963-1993) to build a new capital city, and the government wasted little time to erect its 'Glorious Prince'- Putrajaya. The location for the new administrative capital was chosen in July, 1993; the



Figure 2-1. Malaysia, regional map. Author

conceptual master plan was approved by the Cabinets in February, 1994; the master plan was sanctioned in February, 1995 and the ground works started immediately thereafter (Malaysia, 2008; Perbandanan Putrajaya, 1999). By establishing the new Administrative Center at a new site (or green site), the government set to gain opportunities to have a well planned urban center with modern facilities and technology, as it thrives to be the world's first paperless capital.

After the final site at Prang Besar was chosen in 1993 out of the six considered sites, the Mahathir's administration quickly formed a consortium to develop the master plan for Putrajaya. In contrast with the two earlier Mahathir's mega projects; the Petronas Towers in Kuala Lumpur City Center and Kuala Lumpur International Airport which were the results of international design competitions, this project was to be 'Made-in-Malaysia' and 'Made-by-Malaysian', from the planning stages to constructing phases. This multi-disciplinary consortium, consisted of only Malaysian consultants

comprised an engineer firm, Minconsult Sdn Bhd; a planning firm, Rekarancang Sdn Bhd. (AM), and four architectural firms namely: (1) AJM Akitek Jurunrancang (Malaysia) Sdn Bhd.; (2) BEP Akitek Sdn Bhd.; (3) Hijjas Kasturi Associates Sdn.; and (4) Perunding Alam Bina Sdn Bhd (PAB).

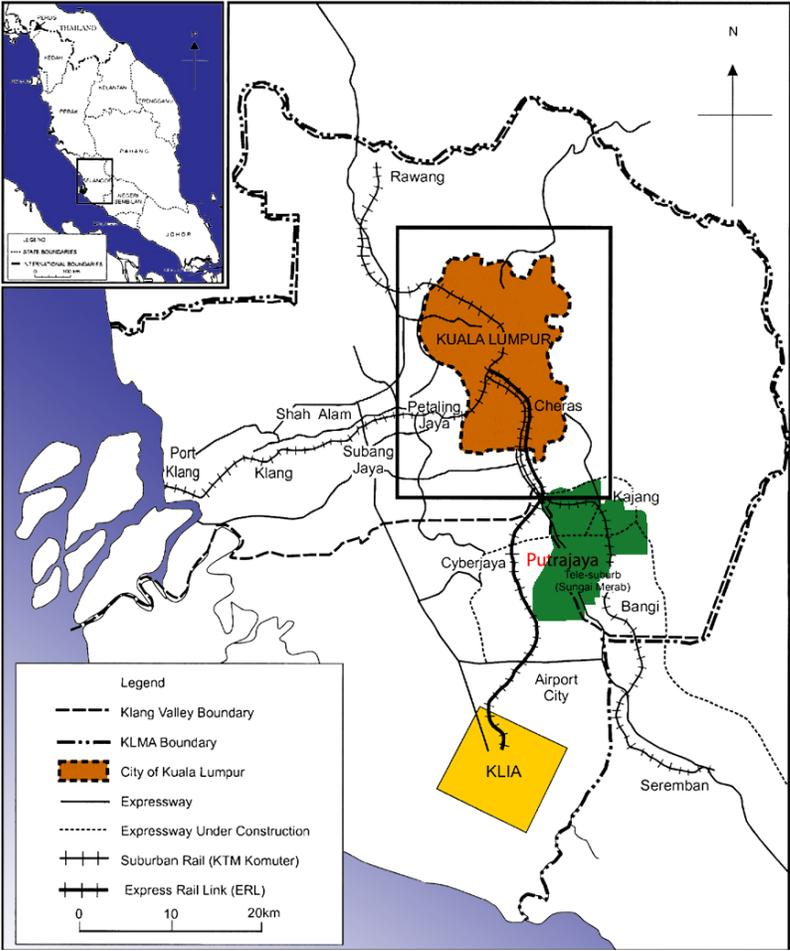


Figure 2-2. Putrajaya territory. Author, adapted from Bunnell (2002, p. 266)

This consortium along with the government’s Federal Town and Country Planning Department (FTCPD) and the Public Work Department were task to produce conceptual proposals for Putrajaya. These proposals had to follow the guidance of three visions and philosophies (1) Man and his Creator (2) Man and Man (3) Man and Nature as specified in the Total Planning Doctrine (Ho, 2006). The trinity philosophy “God – Man –

Nature” was embodied in the Master Plan to assure the Malay’s identification of the newest capital city of Malaysia. The God element here is the almighty Islam, the official religion of Malaysia, or at least the religion of the Malays, the dominated race in the country. The relationship of Man and God is manifested in its purity at the focal point of the Core Island through the application of Islamic design principles in its orientation (the Qiblat axis – toward Mecca) and geometrical setting.

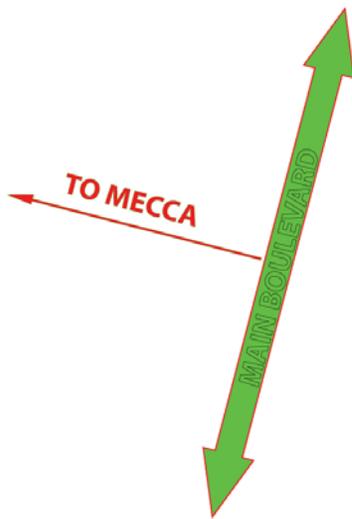


Figure 2-3. The Qiblat Axis diagram. Author.

Courtyards were required to be incorporated into the grand scheme to emphasize interaction. The courtyards and other urban forms were said to be based on the site typography, and the city to be shaped into an urban entity with its own mark and identity, as well as to achieve distinctive characteristics for each of its components. Symbolically, the consequential urban pattern is set to produce “a carving out of nature”, which is “symbolic to and symbiotic with nature” (Perbadanan Putrajaya, 1999).

Five preliminary schemes for Putrajaya were presented to the Cabinet in early February 1994 under various rhetorical labels: a “Sub-urban concept” by PAB; “the Crescent concept” by AJM; an “Elevated Linier City concept” by Hijjas Kasturi

Associates; “Building with Nature concept” by Public Works with FTCPD; and “the Garden City concept” by BEP (Ho, 2006).

The plan by BEP Akitek Sdn Bhd featured the “Garden City’ concept was selected by Prime Minister Mahathir and his Cabinet for adoption as the Conceptual Master Plan for Putrajaya. PM Mahathir formed the Perbandanan Putrajaya (Putrajaya Corporation) to be his project manager for the Putrajaya project, and to ensure the final plan to stay within the two conceptual frameworks: (1) Garden City, (2) Intelligent City.

Reflecting the “Garden City” concept, Putrajaya is sought to reflect the very best in city planning and landscape architectural ideas to realize a new vibrant city of tomorrow according to Howard’s 1902’s concept. Howard was a social visionary; he introduced the concept of Garden Cities as an alternative to the overgrown and congested industrial city (namely London) and depressed, depopulated countryside (Aalen, 1992). There are similarities between the rise of the garden cities concept and Kuala Lumpur of the 1980s and 1990s: rapid and unplanned urban growth caused by in-migration (please see appendix B). Howard’s physical plan for the garden city, like many utopias, conceived on a circular basis and developed a clear zoning system within. Service activities and public buildings are at the center with a belt of residential land around them and the railway and factories are on the perimeter. Public garden, parks and tree-lined avenues are prominent features (Aalen, 1992, p. 29). Howard’s vision is flexibly adapted in the master plan of Putrajaya. Since the location of Putrajaya was an aged palm oil plantation with undulating landscape, the planning of Putrajaya emphasizes its topographical setting to create an ideal natural environment for its residents as a

sanctuary of pressures and stresses of modern living. Following features were incorporated in the grand scheme according to the Design Guideline:

Layout

- a formal axis punctuated with nodal features;
- structuring of the Civic Area into identifiable precincts;
- a variety of informal and formal activity areas.

Landscaping

- 38 percent of the land labeled as green areas
- reforestation and enhancement of the natural landscape;
- promoting local flora as a Malaysian landscape identity;
- creating a network of open spaces.

Urban Form

- designed to suit topography, local climate and cultural norms;
- creation of interesting cityscape;
- optimization of scenic panoramic views and spatial experiences;
- incorporation of intelligent buildings and infrastructural features.

(Except from the Design Guideline, hard copy obtained from AJM office 2006)

Putrajaya thrives to become the ultra-modern city, the 'Intelligent City' within the 'Garden City'. This determination led to the creation of the Multimedia Super Corridor (MSC). Indeed Ibrahim Ariff, president of the Association of Malay Entrepreneurs confirmed that it was the planning of IT requirements for Malaysia's new electronic administrative center that gave rise to the MSC concept" (cited in Bunnell, 2002). Putrajaya's footing would be strategically located in the middle of the MSC to take advantages of the MSC's frontier of computer technology and the Information Age.

The city would share its border with Cyberjaya, its twin city but with different function: the 'technopole' of the region, in other word, the Malaysia's version of the famed 'Sillicon Valley' of the US. The MSC project which was pushed forward from

1996 is a 15 km by 50 km region stretched from the Kuala Lumpur City Center to the Kuala Lumpur International Airport (KLIA). This massive planned urban area is subdivided into seven areas: (1) KLIA; (2) Airport City; (3) Putrajaya; (4) Cyberjaya; (5) Cyber Village; (6) Tele-Suburb; and (7) High-Tech Parks for Research and Development. Equipped with MSC's resources including the 10 gigabit internet cable capable, Putrajaya is determined to be the first paperless capital in Asia to meet the challenges of the next millennium.

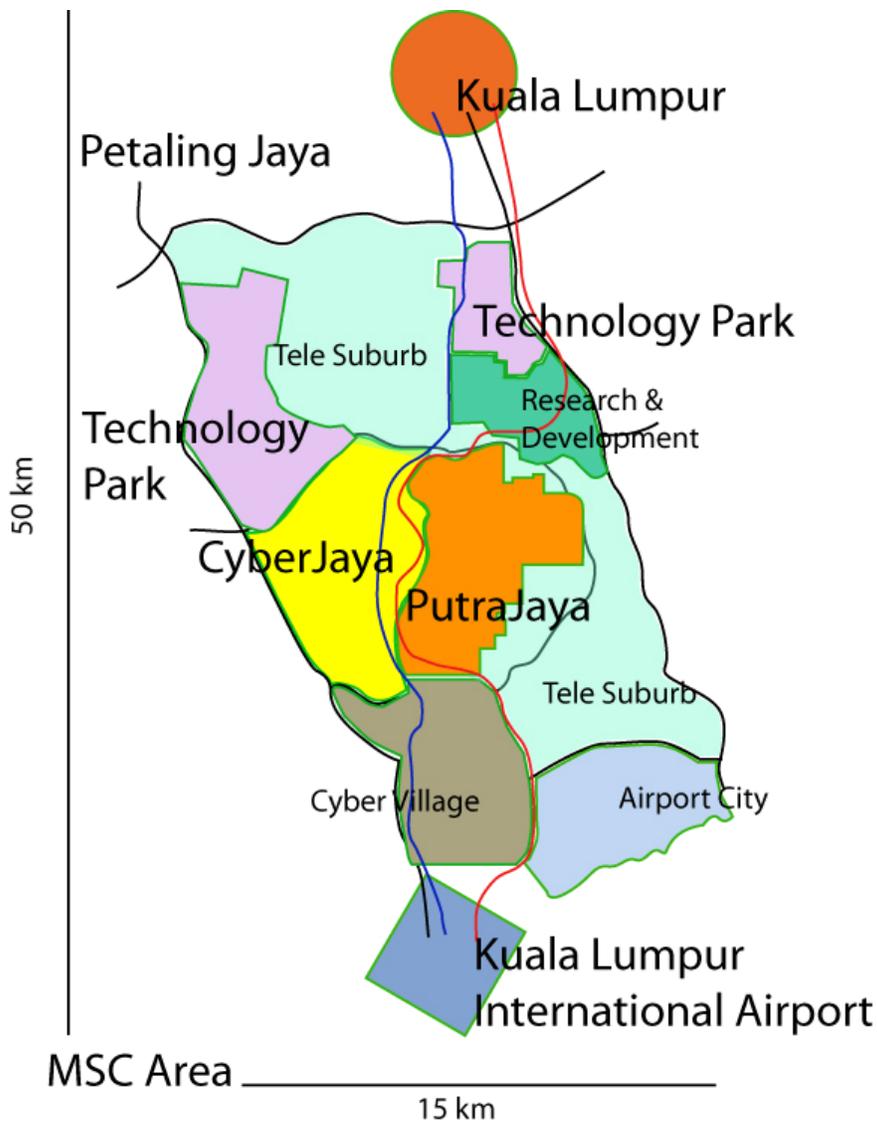


Figure 2-4. The Multimedia Super Corridor (MSC). Author.

CHAPTER 3. METHODOLOGY

The central framework of this thesis is the in-depth case study of Putrajaya, Malaysia's planned administrative capital. It is modeled after Yin (2003) as a holistic case study based on three variables, 1) the questionable role of Putrajaya as Malaysian government's nerve center, 2) the problematic identity as national representation, and 3) the debatable design modeled after "the Garden City" concept.

To study Putrajaya comprehensively, I relied on two methods: reviewing the most recent literature available on the city, and carefully examine Putrajaya's master plan and its implementation. The latter was facilitated via annual field visits to the city over the period of 2005-2008.

Literature Review:

Despite its high profile characters of Putrajaya, the available literatures on Putrajaya are severely limited. As of this time of writing, there are only about a dozen scholarly works published that devoted fully to the study of this city, most of them are online journal articles. The determination of the Malaysian government to build Putrajaya under the motto: "Made in Malaysia" and "Made by Malaysian" may play a role in the lack of promoting for this mega project outside its Asian regional audiences. Furthermore, its Muslim dominance theme makes it popular with Islamic counterparts, but may fail to attract worldwide scholars.

The Designate Role as Governmental Nerve Center

Project of this magnitude involves strong determination by the central government. I examined Malaysia's comprehensive plans, namely the "Malaysia Plans"- the series of five year plans started from 1966, and related policies. I also explored an important

legislation document signed between the federal government and the Selangor state in 1974, concerning the ownership of Malaysia's current capital Kuala Lumpur which played a significant role in the development of Putrajaya. Putrajaya achieved significant progress on its first development phase, and most Malaysia's governmental departments already relocated and have been operating in the city. It has also met some set back in recent years; the economic crisis, criticism from within the governing bodies, and the lack of support from successive administrations. Assessing the future of Putrajaya and its intended role as administrative capital is a significant part of this thesis.

Putrajaya's Identity as National Representation

Malaysia is a young country since gaining independence in 1957, but is an ancient nation with colorful culture. Its countrymen compose of immigrants at different points of history. I devoted significant time to understand Malaysia's multi ethnic society and to trace their historic roots; particularly focusing on the historic elements of the Malays to become the dominant race that had been controlling the governing power since independence.

The 'Garden City' Factor of Putrajaya

Little has been said of Prang Besar, the original location of Putrajaya. I set out to explore the estates beneath the city. The pre-Putrajaya landscape was erased many times over. I also looked for any trace of the once tropical forest and searched for any trace of the site's original characters applied in the "garden city" scheme of Putrajaya.

Examine Putrajaya Master Plan and its Implementation

The master plan of Putrajaya was developed rather quickly. I pursued to explore the developing of the master plan since its early conceptual stages. Putrajaya is the

Nucleus of the Multimedia Super Corridor, sprawling a region of 15 kilometer by 50 kilometer immediately south of Kuala Lumpur. I started studying the planning of Putrajaya in the framework of regional planning. I, then, explored the major factors of Putrajaya's city planning: initial concepts, organization structure, layout & transportation.

The Designated Role as Governmental Nerve Center

By investigating the changes made between phase 1 and phase 2 of the master plan, I determined there had been a significant amount of consideration given to the meaning of Putrajaya as the seat of governmental administration. I analyzed the placement of all government departmental buildings, especially the Prime Minister Office complex as the representation of power over the city.

Putrajaya's Identity as National Representation

I emphasized on the organizational structure of Putrajaya's core area and its prominent feature of the grand Putrajaya Boulevard, designed as a Quiblat axis toward Mecca and its geometrical setting. Also, this section is the result of my attentions predominantly to the architectural representations of the three most important buildings on the grand axis, the Prime Minister office, the Putra Mosque and the Palace of Justice. My central argument is: the lack of non-Muslim factor in the overall design of Putrajaya; instead of forming an identity, a cultural representation, Putrajaya, in effect, reveals identity crisis as well as the tension among ethnic identity and religion.

The 'Garden City' Factor of Putrajaya

The Putra Lake and its highly acclaimed wetland system were closely examined. I set out to study the city's organizational structure, the zoning scheme, the relationship between the civic sector and the residential area. I paid particular attention to the overall planting scheme, especially along the major boulevard. The affect of local

climate to the urban design was also studied to determine the level of adaptation of “Garden City” concept in Putrajaya.

Summary

To evaluate Putrajaya, I need to understand the city from many angles. I first attempt to locate available scholarly works on capital cities, and to some extent, the Garden City movement. I then started by reviewing available literature on Malaysia from its inception to appreciate the country’s multi ethnic and colorful culture. I tried to understand the circumstances that led to the adaptation of Islam as national religion. It is important to locate and study every stage of the master plan, to explore changes along the way. I was fortunate to have many chances to visit the city over the years to compare the plan and its implementation on the ground. In the end, I used all these knowledge to evaluate Putrajaya based on three elements made up the city: the nation’s power seat, the representational identity, and its claim of an ideal city modeled after the “Garden City” concept.

CHAPTER 4. PUTRAJAYA'S MASTER-PLAN AND DISCUSSION

The development of Putrajaya is a fact-track project which is own and developed by the Federal Government.

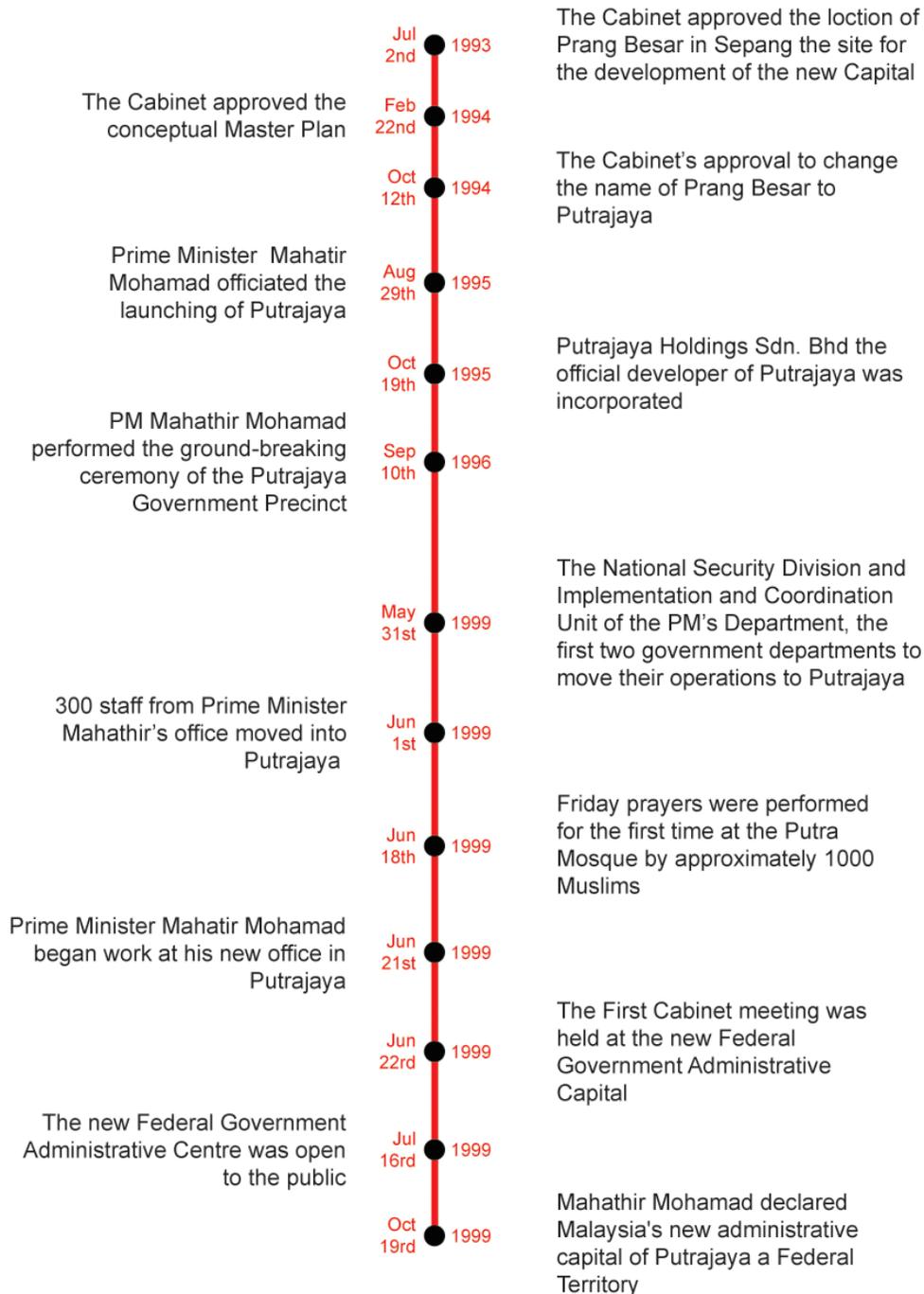


Figure 4-1. Putrajaya's timeline. Author

Putrajaya's Master-plan

The Early Stages

The propose by BEP Akitek Sdn Bhd featured the “Garden City’ concept was selected out of the five proposals by Prime Minister Mahathir and his Cabinet for adoption as the Conceptual Master Plan for PutraJaya.

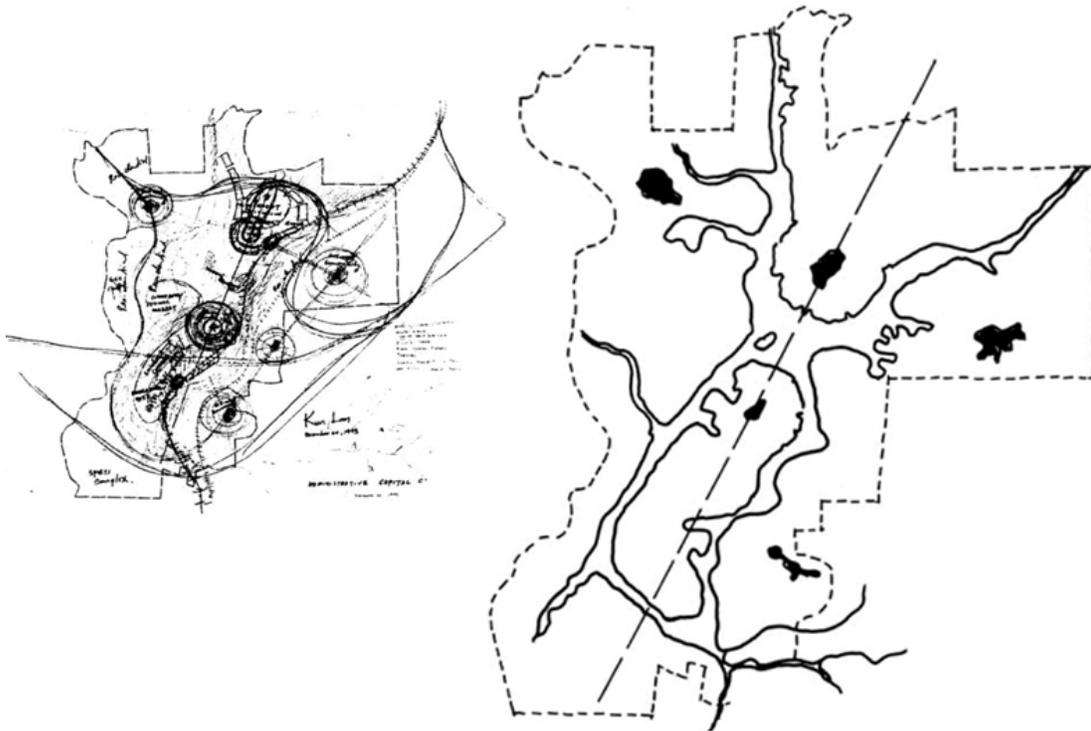


Figure 4-2. The first sketch (Kun Lim, December 20 1993) and the concept abstracted: lake, axis, and “organic” informality. (Source: King, 2007, 2008)

According to architect Kun Lim, the chief designer of the winning entry by BEP, “Capital cities” has axis” (King, 2008). This conceptual scheme features a prominent axis with its high point, the National Parliament to the very north of the axis, the most celebrated location implying the foremost power of Malaysia’s legislated branch. The master plan was to “get organic” from then on to relieve the formality of the axis. As the result, the two-branch lake was transformed from the two small converging rivers on the

site, the Sungai Chuau, and the Sungai Bisa. The axis at this point was the main boulevard in the center island of the lake and measured only 2.2 kilometers as seen on the winning entry below:

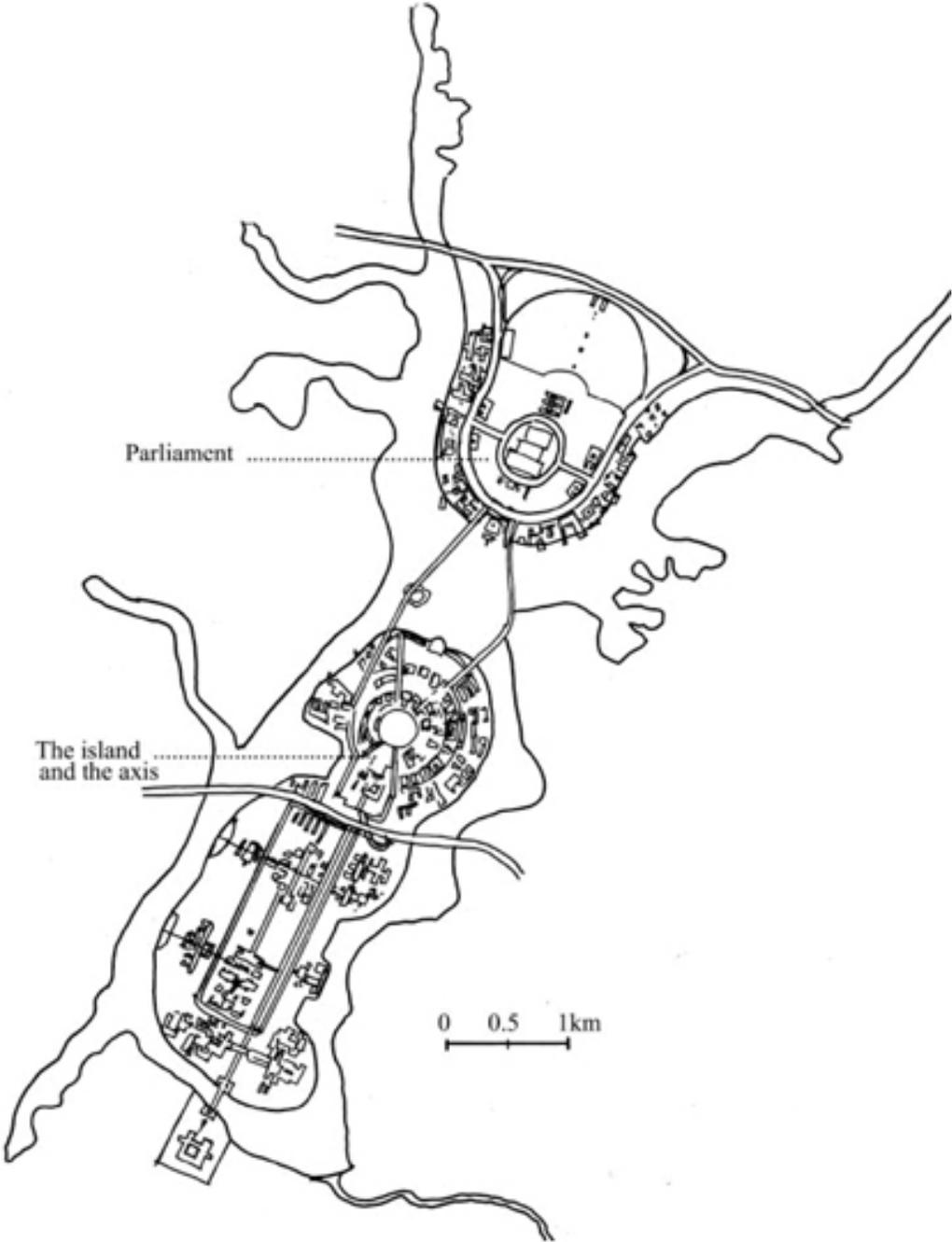


Figure 4-3. Putrajaya's winning entry by BEP Akitek Sdn. Bhd. (Source: King, 2007, 2008)

The six original members along with officials from the Federal Town and Country Planning Department in association with the Public Work Department were combined to form a new consortium under direct supervision of Prime Minister Mahathir, termed Kumpulan Perunding Kota Bistari (KPKB) or “Smart City” to develop the winning proposal into a feasible project. Subsequently, Teo A. Khing of TAK Design Consultants Sdn Bhd was invited by PM Mahathir to join KPKB to refine and develop the adopted concept into the initial Master Plan of Putrajaya. The KPKB’s Master Plan was presented to the Cabinet and received approval in 1995. It is a joint effort by the consortium and the Federal Town and Country Planning Department – a wholly local endeavor as directed by the Cabinet (Architecture Malaysia, 2005).

KPKB took on this conceptual scheme and proceeded to develop the master plan. However, the 1974 agreement between the Federal Government and the state of Selangor, signed by the Sultan of Selangor to relinquish the 243 square kilometers of Kuala Lumpur to the Federal Government (Bunnell et al., 2002) to become the government seat of the newly formed federal at the time. One clause in this agreement dictates: the Federal Territory on which KL stand would revert back to Selangor if the Parliament and the King moved elsewhere (King, 2008). The Federal Government under the leadership of Mahathir obviously was not ready to surrender Kuala Lumpur, and if it ever would. As a result, the Parliament stays in Kuala Lumpur. The intended location for this legislator structure from then on has been reserved for the Prime Minister office. The master plan for Putrajaya became the urban design to celebrate the executive arm of government and the bureaucracy rather than the legislature. Putrajaya’s role was quietly changed from the Capital to the Administrative Capital.

By early 1995, the KPKB completed the Stage 1 of the master plan with some significant alteration to the core area. This civic vicinity was subdivided into precincts according to functions. The government district is remained at the top of the axis with only two structures: the PM office complex and the Putra Mosque. A telecom tower was to be put in the commercial area at its northern end, as a gesture enforcing its “intelligent city” theme. Southward of this axis was a civic and cultural precinct with museums, art galleries, libraries and the Ministry of Finance. The “mixed development” was combined of residential, commercial, recreational and public amenities which were highlighted by the City Hall and Putrajaya’s second mosque- the Grand Mosque. The last major piece of structure in this portion of the axis on the island was the Putrajaya Convention Center. The Sport and Recreational precinct terminated the axis as we saw in the diagram below:

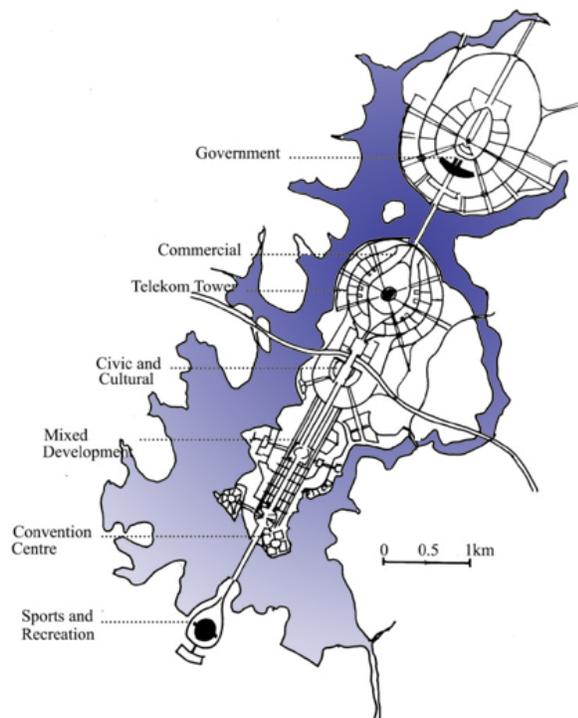


Figure 4-4. Stage 1 of the master plan by KPKB. (Source: King, 2007, 2008)



Figure 4-5. Rendering of the Stage 1 showcasing the formality of the axis and the organic landscape surround. (Source: Architecture Malaysia, 2006)

After this version of the master plan (Stage 1) was approved in February 1995, the Malaysia government formed the Perbadanan Putrajaya (Putrajaya Corporation) to perform as the city's authority and planning agency on the behalf of the government. At the insist of Mahathir, the Stage 1 master plan has gone through another round of revision to become Stage 2 which is closed to what Putrajaya is seen today.

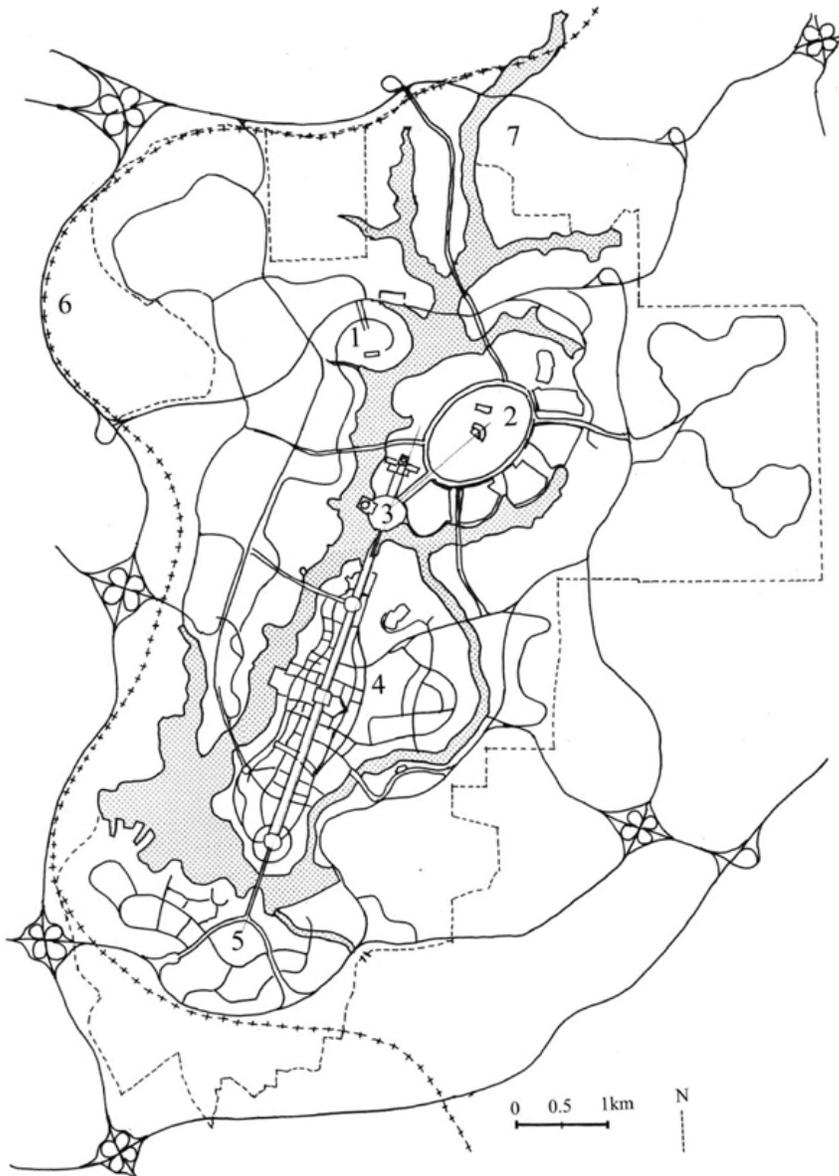


Figure 4-6. Stage 2: (1) The PM's residence; (2) Istana Melawati (the King Palace); (3) Putra Square; (4) the grand axis; (5) Convention Center; (6) KLIA Ekpres - the high-speed train; (7) the wetland.

The Putrajaya Holding Sdn. Bhd. was incorporated in October 1995 to be the developer of Putrajaya. There are three share holders for this holding, taking on the task of financing and building Putrajaya: Petronas-the state oil company (40%), Ministry of Finance Inc.-the government's investment arm (40%), and Kumpulan Wang Amanah Negara-a national trustee group (20%).

Putrajaya, the Master Plan

According to Malaysia government website, Putrajaya is illustrated as follow:

“Putrajaya sits on a magnificent 4,931 hectares spread. Its Masterplan is designed along an axial tangent which runs from the northeast to southeast taking full advantage of the natural surroundings. Its undulating terrain treats visitors and residents to commanding vistas of the environment. About 40% of Putrajaya is natural. Lush greenery, botanical gardens are spread across the landscape enhanced by large bodies of water and wetlands” (Putrajaya Holding website, 2009).

The final master plan to be implemented on the Putrajaya ground today is the product of the last round of change occurred between October 1995 and March 1997. Many of the overall concepts and important features of the original master plan were retained and three issues were raised for improvement (Putrajaya 1997):

- Improvement for efficient and flexible transportation network
- Minimize destabilization of the land as to reduce cut and fill
- Extended boulevard that would further enhance the identity of Putrajaya (Ho, 2006, p. 5).

On transportation network, the review board examined the compatibility of external road links with those inside the city boundary as well as the connectivity with the rail system under construction between Kuala Lumpur and KL International Airport. This

update aims to perfect the transportation network towards a congestion-free public transport city. The earth work which was occurring on the site was reviewed. Based on Stage 2 Plan, a total of 44.9 m³ of fill was required while the total cutting was at 17.7 m³; the difference of 27 m³ of excess fill was one of the targets of this round of change. The review seeks alternate means to reduce this difference by considering existing terrain to minimize overall costs to a suitable level (Ho, 2006). The most impact on the master plan was the boulevard, The 2.2 km Putrajaya Boulevard was extended beyond the island on both ends to increase the visibility from the PM office in precinct 1 and the Conventional Center on Precinct 5. The axis in the previous two stages would become the center spine to not only represent Malaysia's progression, but also to confirm its Islamic commitment, while greatly reducing the amount of earthworks. (Ho, 2006).

Urban Planning: Organization Structure and Layout

The central concept seems straightforward. Putrajaya is an intelligent city within a lush garden, hinging on a balance of ideal qualities of living, and working environment. Architecturally, Putrajaya will be an indigenous city with a modern appearance. Carefully planned and detailed, this intelligent garden city will enhance the goal of the nation in nurturing a caring and progressive society (Perbadanan Putrajaya 2008).

Ever since the beginning of the planning stage, the concept of mapping Putrajaya based on a major axis had been conceded. A grandiose concourse that run north and south symbolized the connection between Kuala Lumpur City Center and KL International Airport, the two iconic project of modern Malaysia. This axis also does a more extravagant purpose: the nation's bond to Islamic religion by placing the Putrajaya Boulevard perpendicular to the direction to Mecca, Islamic holy site.

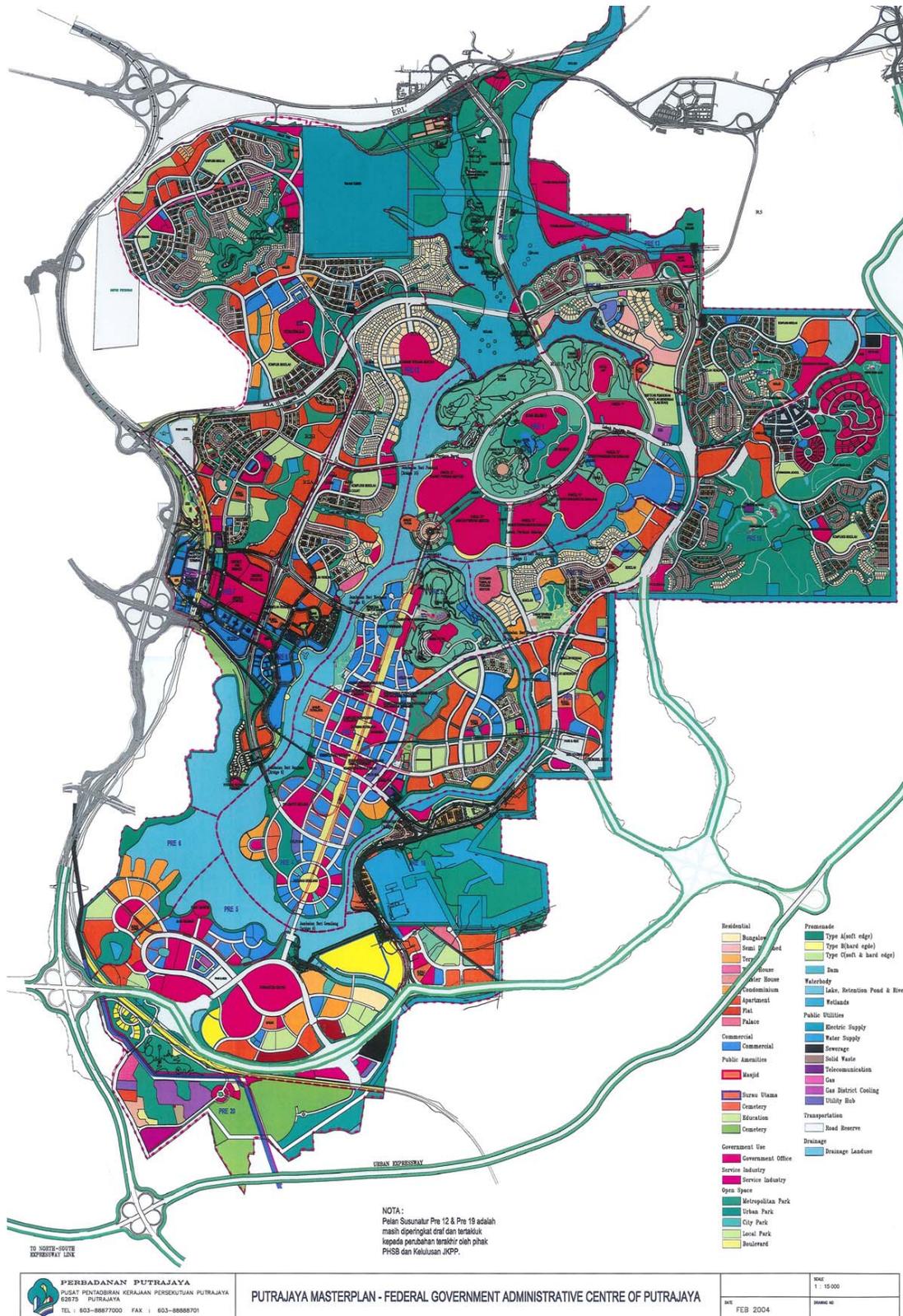


Figure 4-7. Putrajaya's master plan. (Source: Perbadanan Putrajaya, 2008)

The Putrajaya Boulevard represents the continuum of Malaysia's history since Merdeka (Independence). Connecting at Dataran Putra (Putra Square), it links the aspirations and objectives involved in constructing a visionary nation. The Dataran shows the linear progression from the past to the present, and to Malaysia's future.

The boulevard, 4.2 kilometers long, is the first and foremost public. The intended purpose beyond that of movements of vehicles and goods is more of a place for public parade thanks to its width of 100 meters.



Figure 4-8. View of the Putrajaya Boulevard from the Conventional Center. Author 2008.

The Datarans or Squares will serve as nodes or as connections between areas of the city. The Datarans are “gateways” that will stand symbolically on the ceremonial axis framed by the buildings. The Dataran Wawasan located in the middle of the boulevard is also having a significant symbol with its unique oval shape. Teo A. Khing (2006) of TAK Design Consultants Sdn Bhd in his architectural statement explained:

“Oval Form Signifying “Bumi”

Wawasan (vision) and Bumi (earth) together call up images of environmental harmony and developmental growth. A global issue is represented in this Dataran by an oval shaped open plaza oriented toward the Waterfront on a 20:20 axis. The Ministry of Finance and a curved tree lined avenue will encircle the eastern axis with view opening out towards Persisir Air Wawasan. The western axis of the oval plaza is encircled by a pedestrian canopy laneway and dense trees” (as cited in Architecture Malaysia, 2006).

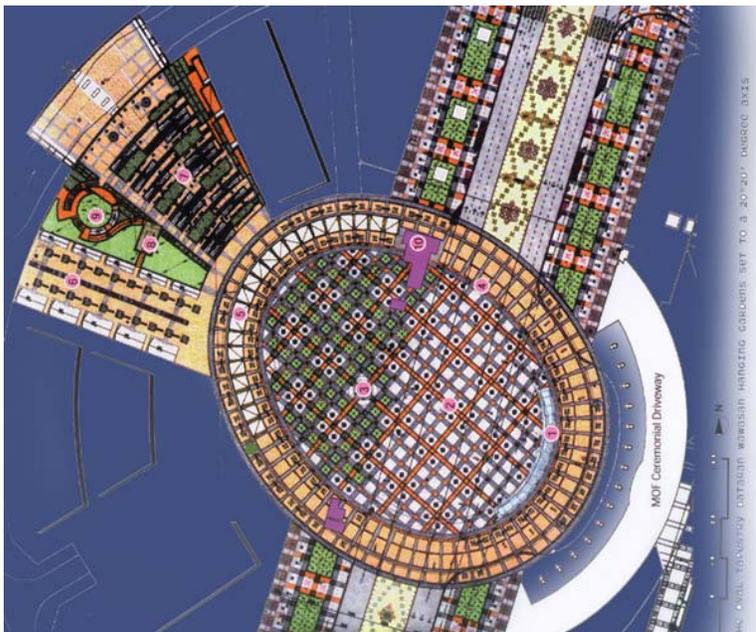


Figure 4-9. Diagram of the “Bumi”. Source: Architecture Malaysia (2006).

The skylines of buildings and architectural features along the entire length of the boulevard will be formed and punctuated in terms of the various heights and the massing at each Dataran.

PUTRAJAYA FACT

Name	PutraJaya, the Federal Government Administrative Center	Statutory Authority: Perbadanan Putrajaya																		
Location	25 km south of Kuala Lumpur, 20 km north of Kuala Lumpur International Airport	Incorporated on March 1, 1996 under Pebadanan Putrajaya Act as the body corporate to administer and manage Putrajaya. As local planning authority, Perbadanan Putrajaya is responsible for formulating and implementing planning and development control policies and urban design guidelines to fulfil the vision and objectives of Putrajaya.																		
Population	330,000 people																			
Total Acreage	4581 hectares																			
Land Use (%)	<table border="0"> <tr><td>Government</td><td>5.3 %</td></tr> <tr><td>Commercial</td><td>2.9%</td></tr> <tr><td>Residential</td><td>25.8%</td></tr> <tr><td>Civic & Cultural</td><td>0.2%</td></tr> <tr><td>Public Facilities</td><td>10.1%</td></tr> <tr><td>Ultility & Infrastructure</td><td>18.2%</td></tr> <tr><td>Green Area</td><td>37.5%</td></tr> </table>	Government	5.3 %	Commercial	2.9%	Residential	25.8%	Civic & Cultural	0.2%	Public Facilities	10.1%	Ultility & Infrastructure	18.2%	Green Area	37.5%					
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Green Area	37.5%																			
Development Components	<table border="0"> <tr><td>Core Area</td><td>1,069.1 ha</td></tr> <tr><td><i>Government Precinct</i></td><td>236.2 ha</td></tr> <tr><td><i>Mixed Development Precinct</i></td><td>155.2 ha</td></tr> <tr><td><i>Civic & Cultural Precinct</i></td><td>135.3 ha</td></tr> <tr><td><i>Commercial Precinct</i></td><td>213.3 ha</td></tr> <tr><td><i>Sports & Recreational</i></td><td>329.1 ha</td></tr> <tr><td>Water Bodies, Wetland & Lake</td><td>585.6 ha</td></tr> <tr><td>Periphery Area</td><td>2,925.3 ha</td></tr> <tr><td>Boutrajaya Boulevard</td><td>100 m wide, 4.2 km long</td></tr> </table>	Core Area	1,069.1 ha	<i>Government Precinct</i>	236.2 ha	<i>Mixed Development Precinct</i>	155.2 ha	<i>Civic & Cultural Precinct</i>	135.3 ha	<i>Commercial Precinct</i>	213.3 ha	<i>Sports & Recreational</i>	329.1 ha	Water Bodies, Wetland & Lake	585.6 ha	Periphery Area	2,925.3 ha	Boutrajaya Boulevard	100 m wide, 4.2 km long	Developer: Putrajaya Holdings Sbn Bhd Putrajaya Holdings Sdn Bhn is the company entrusted to develop the Putrajaya project. Incorporated on October 19, 1995, its shareholders are Petroliaam nasional Berhad (Petronas), the national petroleum company, Khazanah nasional Berhad, the government investment arm, and Kumpulan Wang Amanah Negara, the national trust fund group.
Core Area	1,069.1 ha																			
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Periphery Area	2,925.3 ha																			
Boutrajaya Boulevard	100 m wide, 4.2 km long																			
Transportation Systems	<table border="0"> <tr><td>Intra city - light rail transit, taxi, buses</td></tr> <tr><td>Inter city - Express rail Link, North-South Link</td></tr> <tr><td>KL - PutraJaya - KLIA dedicated highway</td></tr> <tr><td>KL - Seremban Highway</td></tr> </table>	Intra city - light rail transit, taxi, buses	Inter city - Express rail Link, North-South Link	KL - PutraJaya - KLIA dedicated highway	KL - Seremban Highway															
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KL - PutraJaya - KLIA dedicated highway																				
KL - Seremban Highway																				
Phase of Development Implementation	<table border="0"> <tr><td>Phase 1 : 1996-2000</td><td>Phase 2 : 2000-2010</td></tr> </table>	Phase 1 : 1996-2000	Phase 2 : 2000-2010																	
Phase 1 : 1996-2000	Phase 2 : 2000-2010																			

Figure 4-10. Putrajaya fact. Author adapted from Perbandanan Putrajaya (1999)

Layout

PutraJaya, composed on a total area of 4581 hectares (around 13,700 acres), is located in a region where not too long ago was a agricultural area with natural hill and a large swamp area that ran along the north-south axis. This wetland zone was converted into a magnificent man made lake that divides PutraJaya into two major areas: Core Area and the Peripheral Area. The arrangements of transportation systems and zoning are based on the natural topography of the natural hilly site.

The Core Area: the concentration of power and the representational identity of Putrajaya

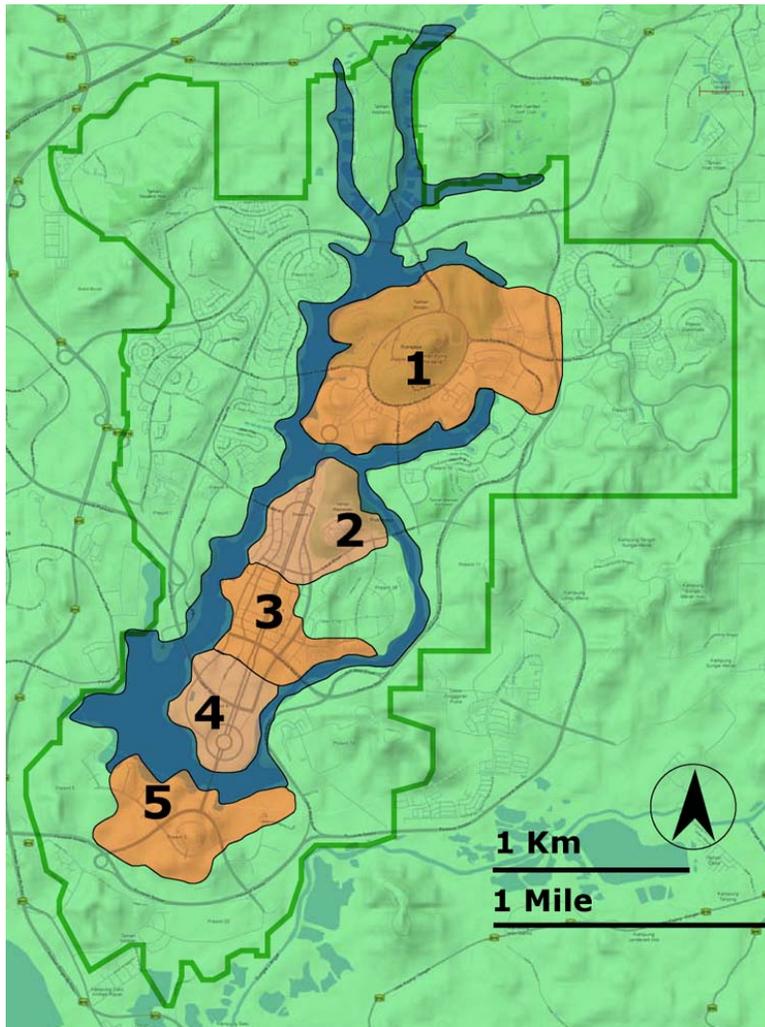


Figure 4-11. Diagram of the Core Area. Author.

The Core Area of Putrajaya, which covers a total area of 1069 hectares, is the heart of the city. It is composed of five precincts which are identified by their predominant functions namely: Government Precinct, Commercial Precinct, Civic & Cultural Precinct, Mixed Development Precinct, and Sports & Recreational Precinct). These precincts, also numbered from 1-5, linked by the 4.2km long Putrajaya Boulevard. The boulevard will form the spine of the Core Area and will stretch across

the central island linking it with the rest of the city. The boulevard will be the main venue for national celebrations, festive and cultural events.

Precinct 1 - The Government Precinct

This precinct occupies a peninsula bounded by the lake and wetland on the west and the east, with the Prime Minister's Office (Perdana Putra Building) overlooking the Dataran Putra. The Prime Minister's Office Complex is located at the head of the Dataran Putra thereby establishing a spatial and symbolic presence at the most important node within the Government Precinct and Putrajaya as a whole. All other government and government-related facilities are distributed around this node. Placing the purple dome Putra Mosque in this governmental area is a symbolic gesture of the federal government's commitment toward Islam. The PM office is also domed to re-emphasize this pledge. In summary, the Government Precinct, as part of the Core Area of Putrajaya, is the primary government-use area in Putrajaya.



Figure 4-12. Prime Minister office. Author 2005.



Figure 4-13. Putra Mosque. Author 2006.

Precinct 2 - The Mixed Development Precinct

This Precinct, at the northern gateway to Putrajaya Core Island, includes commercial and government buildings, parks, open spaces and residential areas.

- Ministry of Finance
- Ministry of Foreign Affairs, and
- Putrajaya Holding Inc.



Figure 4-15. Palace of Justice. Author 2008.

The Mixed Development Precinct is the first precinct on the Boulevard axis. Its form and architecture establishes an urban character with grandiose official establishments on both sides of the Boulevard while providing its residents desirable city living. As this is the first precinct on the island, the portion of the boulevard that runs through this precinct will be the scene of official parade.

Precinct 3 – The Civic & Government Precinct

This Precinct is being developed to house Ministries and institutions related to the development of the arts and culture. The Civic & Cultural Precinct provides spaces for intellectual activities for the development of the arts and crafts, the pursuits of cultural and the preservation and perpetuation of the diverse cultural heritage of its society. The Civic & Cultural Precinct is planned to have the following major elements:



Figure 4-14. Ministry of Finance building. Author 2008.

- Palace of Justice
- Legal Affairs Division of PM's Department
- Grand Mosque (under construction)
- PutraJaya Corporation Headquarter Complex
- Visiting Center

Precinct 4 – Commercial Precinct

Precinct 4 is developed as the main commercial and business district of Putrajaya. To reflect its primary purposes, the Commercial Precinct is highly urban and dense. The Precinct will be well serviced by local roads, open spaces and several pocket parks, around which it is organized. Within this precinct located a few pockets of residential uses to ensure that the place is vibrant at all times. Various components in the Commercial Precinct establish the character of this precinct. This includes the secondary public boulevards, which runs through linking the island to the mainland east to west. The other dominant components are:

- Dataran Rakyat- an informal plaza, which is conceptualized with a park-like character and
- Dataran Gemilang, a circular shaped plaza that marks the southern end of Putrajaya Boulevard.

As with the other plazas, this plaza has a direct pedestrian access to the Waterfront Promenades and vantage point towards the Putrajaya Dam which act as addresses for the buildings that border them as well as providing visual and physical focal points for residents and visitors alike. The third element is the waterfront commercial area which will be the scene for night-time activities and strolling.

Precinct 5 – the Sports & Recreational Precinct

Precinct 5 is being developed for convention and recreation purposes. Besides the Convention Center, other facilities will include sport academies and water based recreational activities. This precinct is devoted primarily to active/passive recreational activity, including entertainment and social activities. Spatially to serve as the bridge between the Core Area and Periphery, its location allows it to merge with the Periphery Area seamlessly.



Figure 4-16. Ministry of Plantation Industries and Commodities. Author 2008.

The main character of this precinct is largely established by the dominance of sports and recreational buildings as well as educational buildings. The Sports & Recreational Precinct is located at the southern most side of the Core Island and act as the termination of the Boulevard.



Figure 4-17. Putrajaya Convention Center. Author 2008.

The Putrajaya Convention Center atop a circular hill is the dominant development component which provides a strong presence to the area. Other components are the theme parks, low-density sports and recreational complexes (including a College and Sports Medicine Complex) and other educational institutions. This prominence forest park would be a mass of greenery in the precinct.

The neighborhoods- the Peripheral Area

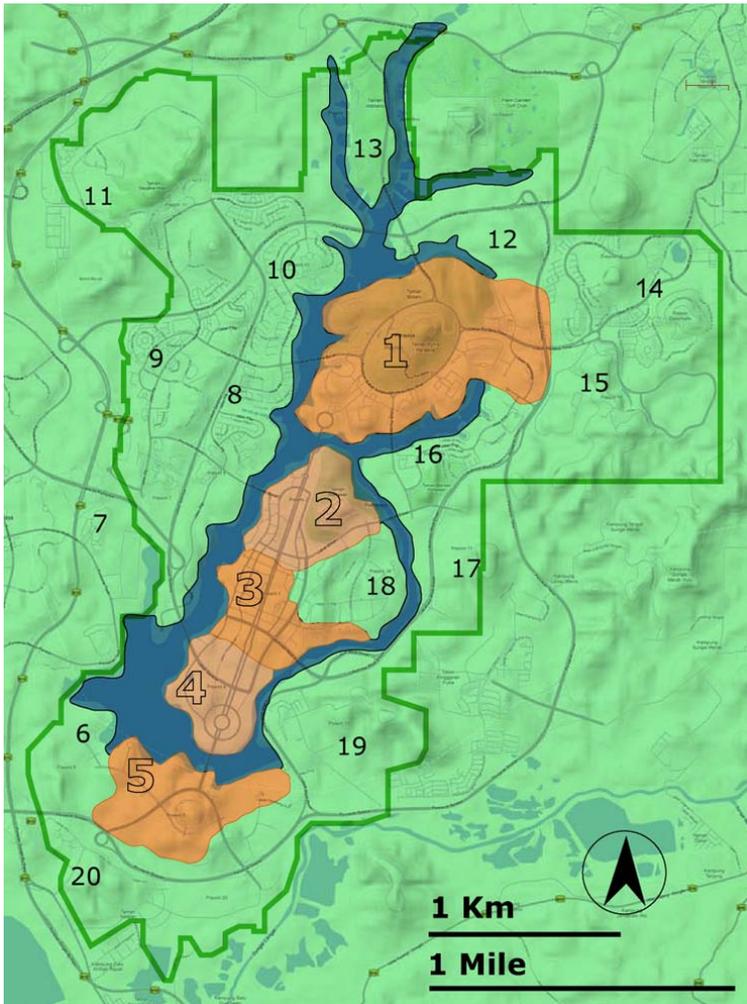


Figure 4-18. Diagram of the Peripheral Area. Author.

Precinct 6 to Precinct 20 along with the Diplomatic Area at the north-east section of the city makes up the layout for Putrajaya. 12 of the 15 precincts make up the

residential neighborhoods, whereas the other three become parks and public amenities. The planning and design of Putrajaya's residential areas is intended to foster a sense of identity through the neighborhood focal points, landscaping and the treatment of the public realm. A total of 67,000 homes of varying ranges, sizes, types and densities have been planned for all income sectors.



Figure 4-19. Typical high-rise residential complex. Author 2008.



Figure 4-20. Townhouse in Precinct 19. Author 2008.

Residential living in Putrajaya will offer a new experience where nature and technology will work in harmony for the benefit of the community. Most precincts will have community and neighborhood centers, parks, places of worship and many other state-of-the-art public amenities. Among the facilities provided in the residential areas are schools, hospitals, shopping centers, mosques, multipurpose halls, learning centers and neighborhood parks.

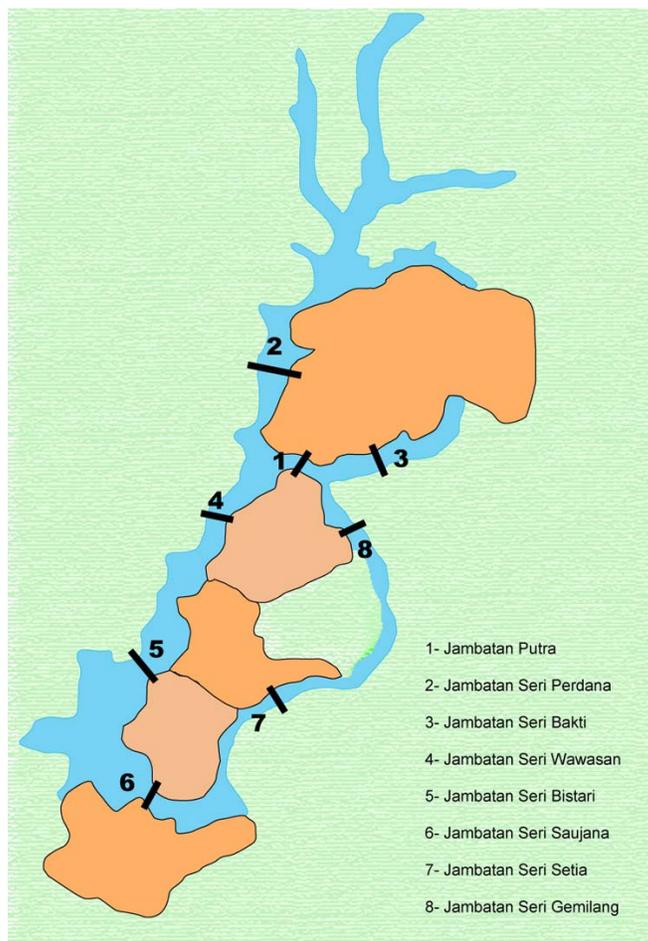


Figure 4-21. Bridge diagram (not to scale) Author.

Internally, the sections of Putrajaya seem to sprawl across the landscape, the city transportation and infrastructure systems provide ways to go about town at ease. A web of two-lane streets spirals throughout the city along with an army of the gondola

like vessels designed to the style of local Malay traditional Perahu. Not to mention *Cruise Tasik*-the air-conditioned cruise boat seats more than 70 persons comfortably and allows all passengers an unbridled view of the spectacular vista that is Putrajaya with its wrap-around glass windows. This connection network is highlighted by a series of bridges between the Core Area the Peripheral Area with styles ranged from classic Islamic influence to tensioned cable modern:



Figure 4-22. Putra Bridge.



Figure 4-23. Tensioned cabled bridge (number 2 on the diagram). Author 2008.

It is also accessible from the out side with modern highways run along the north-south end on both sides, including the South Klang Valley Expressway, Damansara Puchong Highway, North South Central Expressway Link and Kuala Lumpur Seremban Expressway, as well as the high speed Light Rail System ERL that offers quick paths to Cyberjaya, Kuala Lumpur City Center, Kuala Lumpur International Airport and other destinations.



Figure 4-24. Major highway and rail way. Source: Perbandanan Putrajaya 1999.

Putrajaya’s Green Area

Many capitals in the world are often known for their architectural skylines, Putrajaya wants to be known as the ecology center with the complete harmony between nature and architecture. In line with the “Garden City” concept, more than a third of the total area is reserved as open space: 37.5 % of the total area of the city or 1720

hectares (4,250 acre). The Putrajaya Lake, taken 197 hectare (486.8 acre) of the area, is not only the major component of the city but also the linkage between the natural and the built environment. The 38 kilometers of shoreline created with the formation of the lake provide opportunities for development of parks and promenade, an integrated network of green spine which connects all the lakefront parks together. A total of seven parks is adapted in this master plan highlighted by the Taman Botani (botanical garden) located in the northern of Precinct 1 is not only the major attraction of Putrajaya but also the largest botanical garden in Malaysia. This 92 hectare (230 acres) garden was designed as a nation sanctuary housing a collection of some 700 species of Malaysian plants as well as those from Asia-pacific and African.

Discussion

Over 16 years has passed since the palm-oil plantations of Prang Besa were erased from the earth map to be replaced by the glorious prince, Putrajaya, the country Administration Capital. Putrajaya, considered by many Malaysian, is a functional city as the government intended it to be: an urban space that represents center points of political power (Shatkin, 2005). The grand axis, Putrajaya Boulevard, was designed and built to make sure of that. All ministry departments line along the axis and are overlooked by the Prime Minister office at its pinnacle. While the legislature arm is still located in Kuala Lumpur, the executive and the judicial branches are formally occupied in Putrajaya. It is hard to avoid either the green domes of the PM complex, or the massive off-white domes of the Palace of Justice, the Federal Supreme Court building halfway down the grand axis. And finally, the purple dome of the Masjid Putra seems to be floating over the Putra Lake. Of all significant buildings on this celebrated alignment,

the above structures are domed to emphasize its governing roles and also imply its linkage to the Islamic principles the country has taken in as the basic rule of law.



Figure 4-25. The Putra Mosque with the PM office complex in the background. Author 2008.



Figure 4-26. The Palace of Justice. Author 2008.

Putrajaya in the eyes of many Malaysians is a new face of Modern Malaysia. The building of Putrajaya under the rhetoric of “Made in Malaysia” and “Made by Malaysia”

have been providing necessary employment to its population and at the same time improved the country's economic at the expenses of the Federal Government.

During my visits to Malaysia, I had chances to discuss with many Malaysian design professionals and contractors from all ethnic groups. The overwhelming answers I received from them have been positive toward Putrajaya and the MSC, because in a way, the government has taken the international sectors off their competition processes, thus they have less competitors to deal with over the period of constructing Putrajaya.

Putrajaya has received tremendous amounts of praises for its successes, and like many planned cities, this brand new city has also received its shares of criticism both from its countrymen and even members of the dominated party, UMNO, the driving force in the construction. However, it is still early to fully evaluate Putrajaya since a noticeable portion of Putrajaya is still in the works, primarily on the peripheral. The initial completion date of 2010 has been pushed back to 2015 due to internal opposition and financial crisis. Furthermore, all the government administrative departments (ministries) only started to operate fully in 2005. This chapter is a means to evaluate some major challenges that Putrajaya has been facing; its questionable role as the nerve of the country, its representational role of Malaysian as a whole, and a brief evaluation of its intention to be a "garden city".

Putrajaya is a Nerve Center for Malaysia

As of the date of this thesis, the federal capital of Malaysia still is Kuala Lumpur, at least on the record book. Kuala Lumpur and Putrajaya are federal territories as the result of agreements between the federal government and Sultan Salahuddin Abdul Aziz of the State Selangor (ruled from 1960 to 2001) in two different times: 1974 and

1999. The 1974 agreement dictated that Kuala Lumpur has to be returned to Selangor if the Country's Parliament and the King's Palace were moved from the city (King 2008). As a result, while all ministries have been relocated and operating in Putrajaya, the every-five-year rotating Monarchs of Malaysia still takes residence in Kuala Lumpur and the country's legislator departments continue voting in the parliament nearby. However, day to day government operational activities are all occurring in Putrajaya. Putrajaya would be the official capital city of Malaysia only if these last two components were to be contained in its vicinity. It is unclear that Putrajaya ever to become the full fledged capital city of the Federation, but there have not been any obvious sight for that to happen any time soon. Until then, Putrajaya is still an administrative center, though often mentioned as the Administrative Capital by government officials. The placement of parliament buildings is an exercise of power, a spatial declaration of political control (Vale, 2008). Putrajaya, without the Parliament, can only be, at best, the remote governmental compound from the capital city.

Putrajaya is also seen as a product of the Mahathir's administration during his 22 year reign as Malaysia Prime Minister (1981-2003). Like many of his Keynesianism influenced projects, Putrajaya is seen as a utopian idea that drains the country's fund which can be used to better Malaysian's living condition. Many blamed Putrajaya and subsequently the MSC for Malaysia's massive debt. Some countrymen have gone as far as nicknaming Putrajaya as the "white elephant" or the "wilderness", and predicting Putrajaya would be abandoned in the near future. The feud between Dr. Mahathir and his appointed successor Abdullah Admad Badawi (handled the premiership from 2003 to 2008) further intensified the questionable role of Putrajaya. One significant fact worth

mention is the venue of Malaysia's Independent Parade which had been occurring in Putrajaya since 2003, a year after the city first opened to the public was switched back to its original site, Kuala Lumpur in 2008 and 2009. Would that be a signal of the Malaysian government to succumb to internal pressures and external critics? or would it be an early sight of abandoning Putrajaya? The reasons behind such a move were unclear, and often perceived by many Malaysian as a political move to down-play the significance of many Mahathir's mega projects in the post-Mahathir era through emphasizing the attention-shift from utopia thinking back to the 'spaces of everyday life' (King, 2008). The answers to those questions will have to wait as the history book of Putrajaya continues to be written.

Putrajaya as Malaysian Representation

Professor/scholar Dr. Mohamad Tajuddin bin Haji Mohamad Rasdi (2005) of the Universiti Teknologi Malaysia accentuated the case of Putrajaya in the framework: "the search for a national identity seem to be a must for countries which have either newly become independent or a leadership that stresses certain groups of race as being "better" than others. To most countries, this search is a high profile event as it has strong political implications" (Tajuddin, 2005, p. 3). Professor Ross King (2007, 2008), a popular scholar on Putrajaya and the MSC, described Putrajaya as a utopia urban place where as Kuala Lumpur, hereotopias: "While utopias are ideals, dreams, imaged spaces; hereotopias are somehow the opposite: spaces of real world, chaotic, contradiction-laden, and spaces within spaces". Malaysia is a country of immigrants, except for very small groups of aboriginals, Orang Asli (original people) in the forest and Orang Laut (strand and sea people) along the coast (King, 2008); all Malaysians had migrated to the Peninsula at some points through out history. The three major races

that made up the Malaysian: Malays, Chinese and Indian are often at odd with one another, but bearing nonetheless. "Kuala Lumpur is still one of the great multi-cultural cities of the world: variously superimposed, intersecting, jumbled-up, forever transgress of any purist vision, brilliant and exciting: (King, 2008, p. 36). The diversities of Kuala Lumpur in its mentality, its sociology and even its architecture represent the identity of Malaysian as a whole (Appendix A).



Figure 4-27 The National Mosque, under construction. Author 2008.

Putrajaya, on the other hand, is lacking this representation factor. Even on the onset, the design of the master-plan for the city, there was little mention of a spatial arrangement, either Chinese or Indian. Today, there still neither plan nor zone specifically dedicated to any religion other than Islam. There are two-fifth of its countrymen worship deities other than Allah; 19.2% Buddhists, 9.1% Christian, 6.3% Hindus and 2.6% other. Putrajaya has a truly magnificent mosque, the Masjid Putra. A second mosque, bigger in size and directly across the Palace of Justice on Precinct 3 is current under construction on the west bank to be called Nation/Grand Mosque.

However, according to Putrajaya comprehensive master plan, there is no Christian cathedral, Chinese or Indian temple, or other religious institutions that represent the diversity of the Malaysian as in Kuala Lumpur. Multi racial society is an inescapable reality of Malaysia. Putrajaya the planning and structuring completely ignore this reality.

It is fair to observe that Putrajaya is not for all Malaysian, but for the 61.4% of the Bumiputera, and practically to exclude the non-Muslims is not exactly a model of sensitive and socially inclusive urban planning. Similar to some planned cities, Putrajaya had not come in existence through the evolving processes, but started anew from agriculture land. Little traces of the forgotten town beneath Putrajaya can be seen today. Putrajaya has not achieved what Campbell (2000 quoted in Shatkin, 2005) described as being “symbolic theaters for national ideology, a reflections of the larger national stance towards urbanism, a catalyst for national economic development, and at least historically, a bridge between local culture and the “imagined community” of the nation state. In other words, Putrajaya, in effect, reveals tensions between national identity, ethnic identity and religion in Malaysia.

Putrajaya: a Garden Cities

Touted as an intelligent city in the garden, Putrajaya’s master plan is definitely a show case of the balance between green opened space and the built structures. A significant percentage of its total land has been devoted to create the green belt for the city; a picturesque two-branched lake, a biggest national botanical garden, parks and recreational structures. However, little of the original natural environment left to be seen. The once dense tropical forest area had been lost to give way for palm-oil plantations which in turn were replaced by the modern city. It is fair to suggest that the pictorial image of Putrajaya today is the result of a massive retrofitting. The man-made

lake is cut and filled with little consideration to the past morphology or ecological system.

The end result of the overall planting scheme for the inner city, along the main boulevard is yet to be seen. But at the moment, the intended tree-lines on the main axis are almost non-existence. One key factor that raises doubts of the reality of this Boulevard's tree lines is found in the Detailed Urban Design guidelines (DUD) of Putrajaya. The DUD specifies that all trees along the Putrajaya Boulevard have to be planted in pots, and to be removed in the event of national parades. In other words, the shadings along this axis intended to provide covers and bring down the scales of major buildings down to human scale never have a chance to become the reality (Jebasingam, 2005).



Figure 4-28. Typical materials of buildings along the Putrajaya Boulevard. Author 2008.

Putrajaya's core area was designed without significant residential component. In other words, it is an automobile driven urban core with wide asphalt and concreted boulevard framed by massive glass and metal structures. It certainly does not have the

welcomed atmosphere and/or the walk-ability intended of a “garden city”. Throughout, the residential sectors of the peripheral area, efforts had been put into creating bicycle paths along two-lane roadway, however, as King (2008) and Bunnell (2002) observed; the bicycle culture of Malaysia was long dead. A significant factor involved in the development of Putrajaya which seems to be overlooked is the climatic factor.

Putrajaya is only located only a few degrees above the equator, and its humidity level is relatively high. The low density of the city and the man-made lake certainly help the air circulation throughout but not the humidity. Flashy steel and glass buildings are not considered accommodating either. Shadings are significantly limited. As a matter of fact, beside the large parks surrounding the lake (including the Botanical Garden), little attempt has been made to minimize mid-day temperature. On all my trips to Putrajaya, I always performed a walk from the Conventional center in Precinct 5 along the Boulevard to the Prime Minister office to observe the ever growing changes. I often weaved in and out the highly acclaimed glass atriums not only to enjoy their design works, but mostly to take advantages of blasts of air-conditioning to cool myself down along the 4.2 kilometer journey. Never once, that I thought of neither Ebenezer Howard nor his famed “Garden Cities” concept.

CHAPTER 5. CONCLUSION

The manifestation of Putrajaya entered its 16th year as of the time of this thesis was written. According to the Malaysia's governmental plan, Putrajaya should have had its completion ceremony this year, 2010. However, the completion date has been pushed back to 2015, partly because of the 1998 Asian Economic Crisis as well as the current world's financial climate. As of today, Putrajaya has completed all constructions on the Core Area which have been in operation for some time now, except for the construction of the National Mosque on Precinct 3, the second major mosque of the city.

Most of the parcels of the diplomatic section have been developed as well as the residential area. As a whole, though experiencing multiple delays, Putrajaya is slowly emerging as a full fledged city. A third of its intended population of 330,000, mostly government workers and families, has already taken residency within the vicinity thanks to heavy governmental incentive. Affordable housing projects are still in the works in many residential precincts to prepare for the next waves of migrants to the city.

Except on national holidays and religious events, Putrajaya is pretty much an empty city especially in the Core Area. The Grand Boulevard, designed to be the celebration space is nearly deserted. There has not been an influx of pedestrians or tourists on the street. We will have to wait until after 2015 when all construction is completed to have a full assessment of Putrajaya. The development of Putrajaya is continuing, but not without significant challenges at each stage from the planning to implementation.

Firstly, the ultimate challenge is that the city fell short of its intention as the central nerve of Malaysia. I argue that Putrajaya was originally designed to be the capital city

to replace Kuala Lumpur. With the 1974 agreement standing in the way, Putrajaya has to settle as the Administrative Capital and join the short list of countries having multiple capital cities (Cote d'Ivoire, Israel, the Netherlands, Nigeria, South Africa, Sri Lanka, and Tanzania). As the federal administrative capital, Putrajaya's role still falls short of being the government's seat of power. Malaysia's government is structured as a constitutional monarchy, modeled after the British, contains three branches under the ceremonial umbrella of the Yang di-Pertuan Agong (King, the Supreme Head of State): legislative, executive and judiciary. Without the Parliament, the legislative arm, the role of Putrajaya can only be at best, the governmental compound located remotely from the capital city.

Secondly, Putrajaya as it is today falls short of its intention of being the national identity, a diverse, multi-cultural city. I would like to quote Ross King's (2008) proposition on Putrajaya, since I can not put it any clearer: "Putrajaya was developed with the aiming for a Malaysian identity, though it seeks it not in the rich tangle of traditions and communities that constitute the country and its origins but in turning to another tangle of sources: in the diverse imageries of the Middle east" (p. xxv). The beautiful culture made of different ethnicities, religions, architecture and art which is so reflective in the fabric of Kuala Lumpur, the authentic identity of Malaysia is intentionally left out of this new administrative capital. On the contrary, the design of Putrajaya exposes the tensions among ethnical groups and religious beliefs.

Lastly, Putrajaya's landscape and organizational configurations are a result of careful planning. At this stage, however, this planned city can only be considered as an essence of the intended "City in the Garden" concept. The beautiful layout and the

green image of Putrajaya fail to create an invited atmosphere for its residents, as well as failing to attract migration to the city.

Recommendations

It is understandable that Putrajaya still is in the work: this new urban place has a chance to revise its functional role in order to become a real administrative capital, even the capital city. The government could either give up the Kuala Lumpur Territory and move the parliament to Putrajaya or negotiate an amendment to the 1974 Agreement with Selangor. Malaysia is by constitution a democratic country though governed by UMNO, the party of the majority since their Independence. If all Malaysian regardless of ethnic and religious background unite at the ballot box and decide that Putrajaya is the capital then it is.

The establishment of the Parliament in Putrajaya certainly legitimizes the city capital function. As mentioned, the design of Putrajaya's three most important buildings was subjected to Islamic influence. However, in the case of the parliament moves to Putrajaya, the design of this essential building can provide opportunity for making a case of cultural unity. It would be a matter of design. As with the current structure in Kuala Lumpur of neutral fashion by featuring international style, this would-be most important building could be designed one step further by incorporating features that emphasize the multi-cultural character of Malaysia's society. By solving the 'parliament' piece with considered strategy, Putrajaya would successfully establish itself as the power seat of the federal government and the representation of national identity.

On the subject of 'Garden Cities', the overall schematic design of Putrajaya definitely achieved certain level of success. The creations of the Putra Lake, the wetland system, and parks taking more than a third of total land enhance chances for

Putrajaya to fulfill its claim. The harmonious relationship between human and the natural environment as Ebenezer Howard's vision was partially achieved. The picturesque layout does not carry the necessary atmosphere that is conducive to people's interaction with his environment. The local climate needs to be factored back in the overall plan. The shading scheme needs to be rejuvenated especially along the major boulevard. Covered walkways or a more expansive tree canopy need to be provided. Paving material can be retrofitted to reduce heat-island effect. Building facades would need to be altered at least in materials to minimize radiant heat. Street activities should be encouraged year round to introduce vibrant urban atmosphere in the city. The lessons can be learned from a similar tropical urban area only 25 kilometers away, Kuala Lumpur.

The main issue here is the human factor; Putrajaya has not achieved its level of intended density, and this density is already designed to be significantly lower than adjacent urban spaces. Further incentive strategies can be researched and applied to Putrajaya. The city's physical location is an advantage. It is located between Kuala Lumpur and the Kuala Lumpur International Airport, the country's main gateway. It takes only 20 minutes or less to reach either one of these important destinations in Malaysia thanks to modern transportation systems that were upgraded or put in place in the last two decades. Putrajaya is also a major part of the Kuala Lumpur Metropolitan Area (KLMA), the country's largest and fastest growth region in terms of economy. This financially viable role leads to the population explosion phenomenon. The numbers of KLMA inhabitants were double in the 1990s alone. The KLMA today is a sprawling region, spread beyond the Klang Valley to the south and engulfed the Sepang district

which houses the Kuala Lumpur International Airport. Geographically, the KLMA has taken more than half of Selangor State's total area. Economically, this metropolitan area is responsible for a significant portion of the federation's GDP. From a sociological perspective, this urban setting paints the completed picture of Malaysia's diversified culture. Sitting at the heart of this phenomenal region, the success or failure of Putrajaya are relying on Malaysia's people and their ability to influence government and its policies.

Suggested Further Research

The future of Putrajaya, given current conditions, is facing many challenges. Three of them are identified in this research: the role, the function, and the design concept. My case study of Putrajaya is based on the preceding variables. To understand and evaluate a city, there are many more variables need to be identified and studied: housing, transportation, environmental sustainability, to name a few. The scale of the research can also be varied. Putrajaya can be studied at the regional level (i.e. the MSC), national level, Asian's regional level, and beyond. Studies can be conducted as a comparison among capital cities, administrative capitals, and planned cities. Putrajaya can also be examined under different lenses: geography, sociology, politic, and economy.

Final Thoughts

I have been visiting Malaysia every year since 2005. I have seen first hand the continuing vibrancies of Kuala Lumpur and the ever changing Putrajaya. This new planned urban setting has grasped my attention not only because of its massive undertaking and scope, but also for the fact that little has been published on the project. Most scholars, both Malaysian and international, chose to examine to the Multimedia

Super Corridor, the grand project that contained Putrajaya at its center, rather than the city itself. Would that be because of the MSC is the economic mission of the government while Putrajaya is the government? Would it be ignored for being characterized by monumentality, dictatorial power, and state-based capitalism? Would that be because Putrajaya was designed and built entirely by Malaysians, thus lack the exposure to the international community? Or would it be because Malaysia's Middle-Eastern Islamic counterpart, Dubai and its enormous urban transformation engulfed all attentions thanks to its groups of world renowned designers? I have always come back home with more questions than answers.

During my most recent walks on the grand Boulevard of Putrajaya, and its secondary streets, I was consumed by the same feeling I had had when hiking the streets of Canberra, Australia's capital city. Planned and built in the similar fashion of Putrajaya, Canberra today is a five-weekday city, since a significant portion of its residents and officials reside elsewhere and commute weekly to the city to fulfill their role. I could not help but think about the possibility of Putrajaya becoming another Canberra of the modern age.

APPENDIX A. UNDERSTANDING MALAYSIA

Malaysia, a prominent country in Southeast Asia, is a member of the Commonwealth, previously the British Commonwealth. Gaining independent from the British in 1957, Malaysia today is a momentous member of the United Nation and global economic community. The official name Malaysia which literally means “the land of the Malays” from 1963 onward is the shorten version of the Federation of Malaysia. The country flag is said to be designed based on that of the American; 14 alternating red and white to represent the 13 state members and the federal territory. There is a blue rectangle in the upper hoist-side corner bearing a yellow crescent and a yellow 14-pointed star symbolizing its alignment with the national religion, Islam.



Figure A-1. Official flag, (CIA fact-book)



Figure A-2. Malaysia map. Source: CIA fact-book

Geography

Malaysia is a tropical country located near the equator in South East Asia. The country is composed of two noncontiguous regions: West Malaysia on the Malay Peninsula and East Malaysia on the north coast of the island of Borneo separated by the South China Sea. The Peninsula shares its border with Thailand and the East Malaysia takes the northern one-third of the island of Borneo, bordering Indonesia, Brunei. Total land boundaries of Malaysia with its neighboring countries are approximately 2,669 km (1,615.4 miles) as followed: 381 km with Brunei, 1,782 km with Indonesia, and 506 km with Thailand. The two components of the country possess a coast line of 4,675 km (2,905 miles), of which 2,068 km belong to Peninsular Malaysia, and East Malaysia 2,607 km.

With the total area of 329,847 square kilometers (127,355 square miles), Malaysia is slightly smaller than Japan and fairly larger than the New Mexico of the USA. Of that, 328,657 sq km is the total land area; the remaining 1,190 sq km is total water area it controls.

Malaysia's terrain is mostly coastal plains framed by hills and mountains. Malaysia possesses many mineral resources among them are tin, petroleum, timber, copper, iron ore, natural gas, and bauxite.

The tropical is greatly influenced by the annual southwest (April to October) and northeast (October to February) monsoons. Major natural hazards include flooding; landslides; forest fires, and also smoke/haze from Indonesian forest fires. The rapid industrialization of the country in recent decades also brought air pollutions from factories, vehicular, and water pollutions.

Demographic

Malaysia has a population of 25,715,819 (July 2009 est.), and continues to grow at a rate of close to 2 percent per year. An important factor of its population is the urban concentration: and the annual rate of urbanization continues at 3% according to governmental estimates over the period of 2005-2010 (est.) (Country Watch, 2009). Population distribution is uneven, with some 70% of total population (2008 est.) concentrated in urban areas clustered in the lowlands of Peninsular Malaysia, home to some 20 million of the country's 25.7 million inhabitants. The remaining 5.7 million live on the Malaysian portion of the island of Borneo in the large but less densely-populated states of Sabah and Sarawak. More than half of Sarawak's residents and about two-thirds of Sabah's are from indigenous groups.

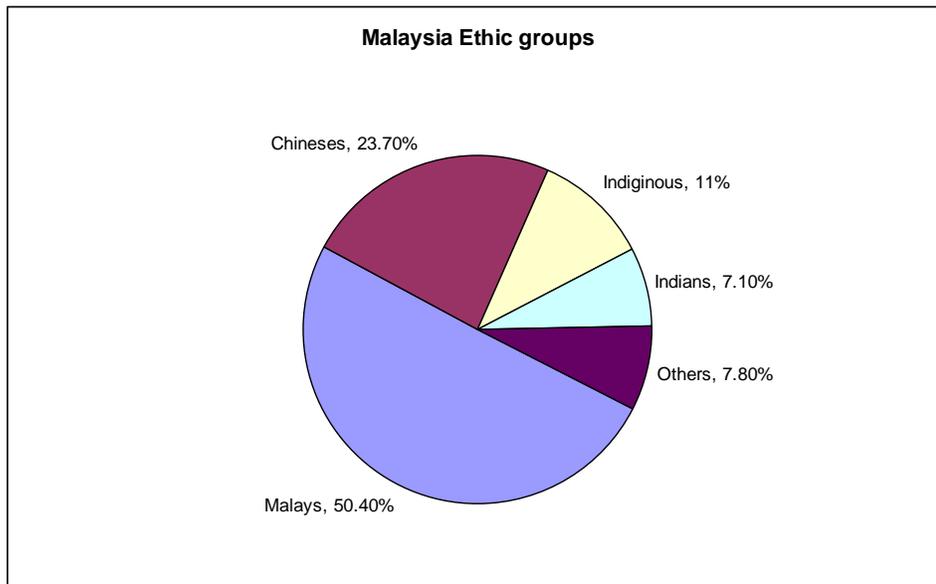


Figure A-3. Malaysia Ethnic groups by the author

Malaysia's multi-racial society contains many ethnic groups. According to the latest estimate, the Malay is the dominant group of 50.4%, mostly concentrated in agricultural areas. About a quarter of the population is ethnic Chinese, a group which historically

played an important role in trade and business. Indian descent comprises about 7% of the population. Non-Malay indigenous groups combine to make up approximately 11% of the population.

According to Malaysian constitution, Islam is the national religion, and by its definition all Malays are Muslim. The proportion of beliefs among its population is reflected as followed: Muslim 60.4%, Buddhist 19.2%, Christian 9.1%, Hindu 6.3%, Confucianism, Taoism, other traditional Chinese religions 2.6%, other or unknown 1.5%, none 0.8% (2000 census).

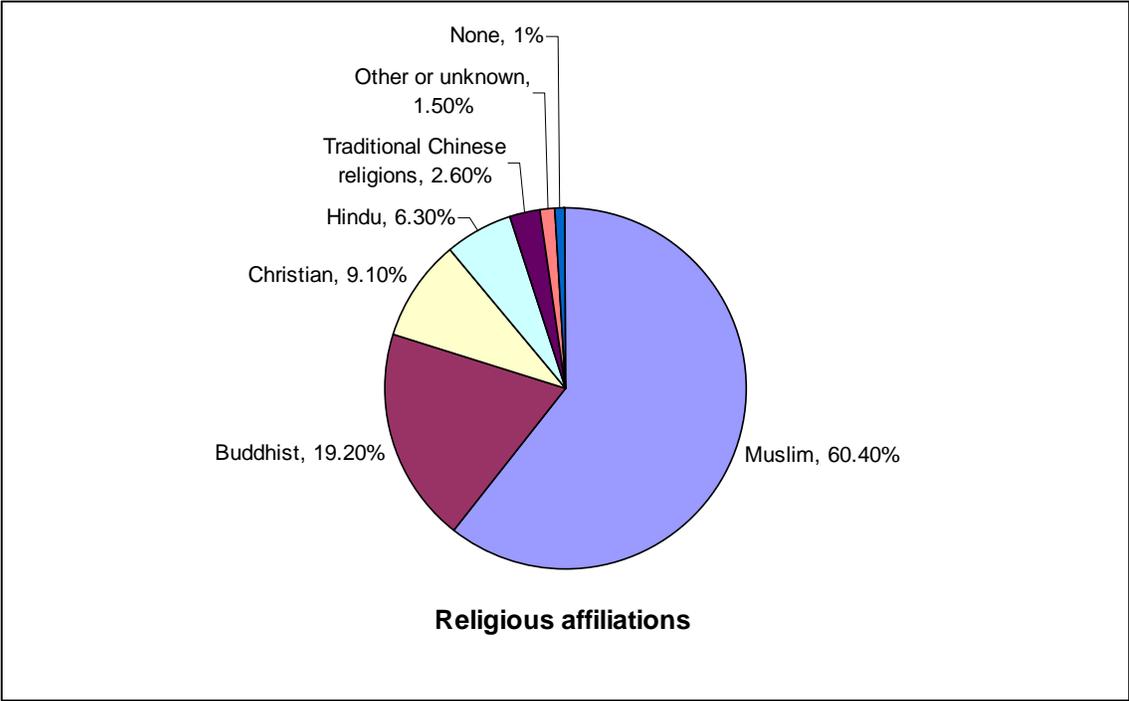


Figure A-4. Malaysia map. Author from CIA fact-book

The outstanding characteristic of Malaysia’s population today is its highly variety ethnic mix. Its multiracial populations represent the world’s four major cultures which are Islamic, Chinese, Indian and Western. The country’s racial, religious and cultural mix is generally harmonious; the various communities remain largely separated.

Governmental Structure

Malaysia government is structured as a constitutional monarch, based on the British model. Malaysia is a federation of thirteen states (Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang Perak, Pulau Pinang, Perlis, Sabah, Sarawak, Selango and Terengganu) and a federal territory with three components: Kuala Lumpur, Putrajaya in Selangor and Labaun, an island in Sarawak of East Malaysia.

There are four components of this complex federal political system:

The head of State (King or Supreme sovereign) elected by the Conference of Rulers from one of the nine hereditary Sultans every five year,

The Prime Minister is elected and formally appointed by the King to administrate the federation with the assistance of and appointed ministerial cabinet

The legislated power lies in the hands of the bicameral parliament, comprising Dewan Rakyat (House of Representatives) and Dewan Negara (Senate).

Civil Courts include Federal Court, Court of Appeal, High Court of Malaya on peninsula Malaysia, and High Court of Sabah and Sarawak in states of Borneo (judges are appointed by the king on the advice of the prime minister).

There are state governments in each of the 13 states, in nine of which the head of state is a hereditary ruler. Each state has its own constitution, and a council of state or cabinet with executive authority, and a legislature that deals with matters not reserved for the federal parliament. The other 4 states are governed by governors appointed by the federal government.

Economy

The Malaysian economy is a mixture of private enterprise and public management. Its economy grew by an average of 9% annually between 1988 and 1996. By 1996,

Malaysia had become the world's largest exporter of hard disc drives for personal computers. Malaysia is also the world's largest producer and exporter of edible oil (palm and palm kernel oil) and the world's largest producer and exporter of tropical hardwood logs and lumber. By 2005, it was the 33rd largest economy in the world by purchasing power parity (PPP). Its gross domestic product for 2005 was estimated to be \$290 billions (Harris, 2002).

With East Asia in recovery mode and advanced economies progressively improving, the Malaysian economy is emerging from one of the worst export slumps in its economic history. Since global demands plummeted started at the end of 2008, manufacturing firms have braced for impact by cutting production, running down inventories, and slashing investment. Given the importance of exports in the economy, the resulting impact on GDP was pronounced. But the turmoil in manufacturing did not lead to a broad-based recession. Private consumption and service sector activity was resilient: growth stalled but levels remained intact. The crisis was mostly a manufacturing-for-exports crisis. The Malaysian economy, as a whole, was one of the hardest hit in the East Asia region, but it remained resilient. Sound fundamentals and responsive policies provided support. Strong financial supervision and limited exposures to toxic securities and troubled financial institutions shielded the economy from financial contagion. High levels of international reserves relieved the impact of capital outflows. Sound household and corporate balance sheets cushioned the impact of the downturn. On the policy side, accommodative monetary and credit policies protected the flow of credit. Successive fiscal stimulus packages helped boost confidence and construction

activity, and hereby contributed to the cushioning of the downturn (World Bank report, 2009).

Malaysia today becomes an export-driven economy spurred on by high technology, knowledge-based and capital-intensive industries. Despite setbacks from the 1998 Asian financial crisis and the current world economic turbulent, , Malaysia gained two spots to become the 31st largest economy with purchasing power parity of 378.9 billions, according to the most recent estimate in 2009 (CIA fact book, 2010).

History

Malaysia, as we know it today, is a small country in South East Asia. It is also a relatively young state after gaining independence from the British's rule in August 31st, 1957. Malaysia had once been neither a small nor young nation. Malaysia is only a fragment broken from the once vast *Sri Vijaya* Empire (Andaya & Andaya, 2001); the *Malay-Indo* Kingdom rose around 600AD with a celebrated capital at *Palembang* in southern Sumatra (located in present day Indonesia). This once powerful empire was broken into Malaysia, Indonesia, Singapore, Brunei and East Timor. Geographically situated in the southern tip of South East Asia with the Indian Ocean and the Straits of Malacca (Melaka) on the west and the South China Sea in the east, Malaya (former name of Malaysia) was at the center of trade routes between India, the Middle East, Europe, China and Japan. This not only invited trading activities but also opened up the country to a sizable immigrant population and consequently to religious, linguistic and cultural influences. Over millenniums of existence, Malaysia has been a natural meeting place of trades and cultures, which has brought the area great wealth, and also has however made it difficult for the Malay peoples to resist foreign influences and dominations.

In order to understand Malaysia, its society structure and its fortitude as an Islamic State, we need to go back to the country long history. There are archeological evidences of human inhabitances in the Malaysia some 40 millenniums B.C. However, historians have not always agreed with each other in Malaysia's ancient past often for its insufficient evidences, as the case of many countries in the region. The truth is that there is not much archeological confirmation or written records from ancient Malaysia. Until more reliable archeological evident surfaced, the following is the version that most historians agree on.

Ancient Malaysia (before 100BC)

We do know that homo-sapiens have been in Malaysia for a long time. The oldest known evidence of human habitation in Malaysia is a skull from the Niah Caves in Sarawak dating from 35,000 years BC. Stone-Age tools dated back to about 10,000 BC have been found, and some archeologists suggest that they were left there by the predecessors of the Negrito aborigines - considered to be one of the first groups of people to inhabit the Malaysian peninsula (Andaya, 2001). Around 2,500 years BC, a vast population of seafarers and farmers made up of the called the Proto-Malays came to the peninsula sent the Negritos into the jungles and hills (Geographia, 2009). The Proto-Malays was believed to come from China and were more 'technologically' advanced, especially in comparison to the stone-age aboriginal. The Proto-Malay was replaced by another group; the Deutero-Malays. They were a mixture of many peoples - Indians, Chinese, Siamese, Arabs, and Proto-Malays - and they came to domination by mastering the use of ironed tools. Over the period of more than 2000 year this group of inhabitants united with the occupations of the Indonesians to form the racial basis for the group which today called the Malay.

Hindu Kingdoms (100 BC - 1400 AD)

Indian had begun coming to the Malaya Peninsula for at least several centuries before the beginning of the Christian era. Their maritime trading fleet provided an alternated mean of inter-countries trade from the fame Silk Route at the time after finding the sea course to China by bypassing the Malacca Straits. Similarly to the Silk Road, they were sailed to the rich, cultured civilization of China; they sold peppers and cottons there, and returned with silks, porcelain and precious metals. The Malaya Peninsula became the resting place for the East-West journeys. Moreover, they discovered that the most precious object of all, gold, could be secured also in the Malay Peninsula. The Peninsula became not an obstruction to be sailed around or walked across, but a land attractive for itself, particularly the east coast (Tregonning, 1964). About the beginning of this era Indians arrived in great numbers- among them priest or monks who brought calendar, the art of writing (*Sanskrit*), and new ideas on law and administration (Purcell, 1965). Hinduism and Buddhism were quickly taken roots in Malay culture, and before long, intermarriages between Indian and Indigenous people and even local chiefs brought the Hindu ideas of Kingship into the otherwise tribal society. Hinduism and Buddhism swept through the peninsula, bringing temples and Indian cultural traditions from India. As a result, local chiefs combined what they considered to be the best aspects of India's government with their own structure, thus resulting in "*Indianized kingdoms*."

According to the Chinese records of the 6th century A.D. there was an important kingdom existed on the northern part of the Peninsula, which was under the protection of the Funan Empire, ancient pre-Angkor Indianized kingdom located around the Mekong Delta in Cambodia today. According to Malaya mythology, this kingdom was

named, 'Negri Alangkah-suka', loosely translated as 'the Land of the Delights' (Miller, 1965). This Hinduism kingdom was born sometime in the fifth century A.D. (Andaya & Andaya, 2001) and flourished until 627 A.D. (Miller, 1965). This kingdom was replaced by the Sri Vijaya kingdom founded on the western side of the Malay Peninsula. This kingdom soon after extended its grips to the entire area on both sides of the Straits, and replaced the Funan as the most powerful empire of South-East Asia.



Figure A-5. Historic map of the Sri Vijaya. Source: Bujang Valley Museum

The Sri-Vijaya Empire was dominant by its maritime power; its fleet established check points, naval bases at strategic places to control the marine trade route between the two ancient populous powers, India and China, as well as to control and protect trade coastal establishment throughout the empire for over seven centuries. The empire's powerful naval and its abilities to combat pirates and protect merchant ships earned the alliance and received protections from with many Chinese dynasties. It was ironic that the centuries-long powerful Sri Vijaya's naval force was one of the main reasons for the collapse of its empire when its fleet started committing pirating acts and competed with one another (Tregonning, 1964). Majapahit, like the Sri Vijaya, was a Hindu empire take over the power in 1292, and would last for over 200 years before the birth of the Malay empire of Malacca, which was to become renown from Europe to China (Miller 1965).

Golden Age of Malacca and the Islamic Adaptation (1400 AD - 1511 AD)

Toward the beginning of the 15th century, the Malaysia peninsular had become the best trading area in the region as stated in Chinese, Indian and Arab records for its strategically location. However, the Hindu kingdoms of peninsular Malaysia were largely weakened for the lack of a central power, combined with the nuisance of pirates, amplified the need for secure, well-equipped port in the region. This problem was mended by the emergence of Malacca, which was in an ideal location and situation, attributing to its great success (Geographia, 2009)

According to the earliest Malay writing of history, the *Sejarah Melayu*, loosely translated the Malay Annals, written about 1541 (Unesco, 2006), the Kingdom of Malacca was founded around 1400 by Parameswara, the then prince of Palembang State. It is important to notice that Parameswara is a tittle, meaning "Prince of Consort",

who real name and physical figure was lost in history. Parameswara, who had married a princess of the last king of the Madjapahit Empire, declared independence from the Empire and moved to Malacca, then only a small fishing village to build his own foundation for the Kingdom of Malacca (Purcell, 1965). Malacca, a coastal village on the northern bank of the Straits, was an area combined by river, hill, and flat land which offered possibilities for trade, agriculture, and best of all, defense. The progression of maritime trades and adventures of the Ming Dynasty of China between 1403 and 1431 advanced the role of Malacca and made it the most influential port in South-East Asia at the time. One additional helpful fact was the alliance between Parameswara, and his newly founded kingdom with the Ming Emperor of China, who figuratively appointed Parameswara as the king of Malacca, along with a seal and a commission. The trade between China and the group of influential nations bounding Indian Ocean and as far as Europe via Malacca were exceptionally flourished. Among those traders were groups of wealthy Indian Muslims and powerful Arab who controlled most of trading activities on both sides of the Straits. At the same time the representative from the Ming Dynasty, the protector of Malacca Kingdom, was Admiral Cheng Ho who was also a Muslim with his powerful fleet regularly sailed to the Straits to exact tributes from the region (Tregonning, 1964). Taking advantage of the circumstances, Parameswara converted to Islam and adopted a Muslim name, Iskandar Shah, and started addressing himself as Sultan (Miller, 1966). He also adopted Muslim religion and its ruling system at his court in 1414. The newly found kingdom under the governing of its first Sultan started prospering and within 50 years became the most important trading junction between the

East and the West. Purcell (1965) wrote of the prosperity of Malacca at the beginning as follow:

“The annually trading seasons, governed by the monsoons, Malacca was a huge fairground where the products of many centers were exchanged – Venetian glass and metal ware, and Arabian opium, perfumes, pearls, dyes, cloths, tapestries and incense came in with the south-west monsoon from April to October; spices, porcelain, damasks, silks [from China], gold and tin, even birds from the Banda Islands whose feathers had a market in Arabia and Turkey sailed out with the north-east monsoon from October to April.”

At the same time Islam was establishing its hold on Malacca and Muslim theologians flocked to the region from India, and the Red Sea and the Persian Gulf (Miller, 1966). However, Islam did not become the official religion of Malacca until Sultan Mazaffar Shah, the Malacca third Sultan and great grandson of Parameswara declared Malacca a Muslim Sultanate and Islam the State religion (Miller, 1966, Tregonning, 1957, 1964). From Malacca, the Muslim faith spread out to cover the entire area which was once belonged to the Sri Vijaya Empire following the trade routes. Local rulers alternated their grandiose Indian title of Maharajah for the Muslim ‘Sultan’ after converted to Islam, and eventually fell in to the embrace of the Malacca Kingdom. The conversion of the Malays from Hinduism and Buddhism to Islam was gradual and was not completed in the Malaysian Peninsula until the middle or end of the seventeenth century. Most historian agree with Tregonning (1964) that it was the only great expansion of Islam that was peaceful, in contrast with most other that followed invading armies.

Professor Barbara Watson Andaya, Ph.D. of University of Hawaii, along with Professor Leonard Andaya, (1984, 2001) both respectable historian of Asian study offered three significant reasons for the success of the Golden Age of Malacca in their book "A History of Malaysia" as followed:

First: learning from its predecessor, Sri Vijaya, Malacca ensured the success of international trade by guarantying the safety of its sea lane. Its powerful naval force set up check points along the Straits and kept the marine route secured from piracies.

Second: having being the maritime gateway between the east and west, Malacca put exceptional efforts into provide commercial facilities. Protected town and especial secured storages made Malacca the ideal trading post since all departing, arriving and trading activities were controlled by monsoon winds.

The third and most important factor for Malacca's success was the establishment and the enforcement of the 'Undang Malaka' (Melacca Laws) which was assembled by the third Sultan. This laws devoted considerable attention to the regulation of commercial matters. A large section of which was the set of codification of maritime laws concentrated specifically on matters concerned with sea-going trade, such as the collection of debts, shipboard crimes, and the duties of captain and crew. A mere 6% tax from the total goods value was collected by Malacca government from every trading vessel.

The Kingdom of Malacca, earned the reputation for security, a well-ordered government, highly protected trading towns, and well-equipped marketplaces, became the primary trade center in South-East Asia. From the judicious taxation of the trade, the Sultans of Malacca grew rich and powerful, and expanding its kingdom to the entire

region. For over 100 years of existence, from 1400 to 1511, the kingdom of Malacca was expanded and flourished and subsequently gained the title the “Golden Age of Malacca.” This golden century, sometimes called the Sultanate era, was the spiritual foundation for the Malay race of today and also seen by many Malays as a starting point of modern Malaysia.

This rising power and prosperity of the Malacca drew attentions of the newly found naval powers of Europeans, namely Portugal, Dutch and British from the beginning of the 16th century. The arrival of these powers, thanks to their advancement of naval technologies marked the new area of the Malaysia, the Colonial Malaysia which last until 1957 when Malaysia gained independence.

Colonial Malaysia (1511 AD - 1957 AD)

The Portuguese Conquest of Melaka (1511 A.D. -1641 A.D.)

For over 100 years of prosperity and the gate keeper of the trade routes between the East and the West, the Kingdom of Malacca was the target of the new power, the European, which was at the beginning state of industrial revolution. These European powers, namely Britain, Spain, Portugal and Dutch, looked for the domination of the spice trade and supply of industrial metals: the precious gold and tin started eyeing the eastern world. The Straits of Malacca and the Malacca Kingdom became the obvious target. The race to Asia was at full force, the Portuguese was the first to conquest this gateway to the eastern world. Under the leadership of the fame naval general Alfonso de Albuquerque (1453-1515) and his fleet, Portuguese captured Malacca on the 2nd of May 1511 and started its complete foothold on the entire Malacca Kingdom on January 1512 (Miller, 1964) with the completion of the Formosa fort (which is still stand today.

The fall of Malacca to the Portuguese marked the end of dominant Muslim trade. The Portuguese was now the prominent controller of the trade throughout its 130 years occupying Malacca. However, The Portuguese did not make any attempt to establish their dictation over the kingdom, but chose to co-exist with the existing sultans on the base that they controlled the trade to Europe. Christianity, which often sent priests on Portugal exploration vessels, began to penetrate Malacca, but with modest success comparing to the Islamic influent which already taken root in the Malay Peninsula. The Portuguese century of influence on Malaysia did bring one important contribution; the foundation of the Malaysian writing system, the Rumi- the Latin alphabet writing system which is co-exists with the Arabic Jawi in Malaysia today.

The Dutch (1641-1824)

Dutch, taking advantages of the fact that the Portuguese had chosen to co exist with the local sultans, made exclusive trading arrangements with these rulers and formed alliances with the enemies of Portuguese Malacca, including Aceh and Johore. At the beginning of the 17th century, Johore, a powerful state on the southeastern of the peninsula grew to be one of several dominant trading states. In the early 17th century Johor made several attempts to capture Melaka, but without any success. After the Dutch-Johor agreement made in 1637, the Dutch naval force with the assistants from Johore captured Malacca, and took over control of the peninsula in 1641 and subsequently the entire region on both sides of the Straits (Purcell, 1965). Within a few short years, the Dutch exclusively controlled the spice trade from Asia to Europe. Besides having exquisitely power over spices, the Dutch was also in command of the tin production, the valuable commodity for Europe which was at the early state of industrial age. During their two centuries occupying the Malaysia Peninsula and the Archipelago,

the Dutch was often on defensive on two fronts, the local sultans and the western powers over the lucrative spice and tin trades. Among the western power, the England East Indian Company (controlled by the British government) remained the greatest thread; however its fleet was defeated by the Dutch in 1683 and surrendered most of its trading post on the peninsula except for one in Penang, a coastal town in the northeast. At home in Europe, the Dutch-Netherlands was drawn in to the turbulent of the French Revolution and subsequently the Napoleonic war. Netherlands eventually fell to the powerful wrap of the French and started allying with its past foe, the British, to regain independence. As a result, the Dutch's grasp on many of its colonials started to fall to the British. After the French conquered the Netherlands in 1795, the Dutch chose to allow England to oversee the port of Malacca rather than to turn it over to the French (Emerson, 1964). The Malaysia Peninsula was peacefully transferred to the British on 1824, ending 183 years of Dutch's occupation.

The British (1824-1957)

The battle of Waterloo in 1815 marked the end of Napoleon Bonaparte, and the French domination. It also signaled the rise of the British Empire, the United Kingdom, which was known for its powerful naval fleet dominating the world oceans over the next century. 1824 in London, Prince William the Fifth of Holland signed the Anglo-Dutch Treaty divided the region between them, Malacca to the British and the Dutch controlled Sumatra and all areas below the Straits.

For most of the next 50 years, the British East India Company, besides maintaining controlling maritime trading activities, put great effort in successfully conquering the internal portion of the Malaysia Peninsula. The Company turn over control to the British government in 1867, the Malay Peninsula officially became the

crown colony of the British Empire. Having exclusive power over the Peninsula, the British brokered the Pangkor Agreement in 1874 and gained the monopoly on the most important commodity, tin, which was in high demand in European industrial revolution. This treaty also laid the framework of the British Colonial Era. The treaty recognized the existing rulers as Sultans, but crucially insisted that they should accept a British Resident in his state, whom advised upon all matters other than those relating to Malay religion and custom. The British interpreted broadly which matters were unrelated to 'Malay religion and custom', as a result taking effective control of most financial and administrative matters. By the turn of the twentieth century, the pattern of British rule in the Malay lands was established with four components:

Penang, Malacca and Singapore were united as the Straits Settlements ruled by a British Governor in Singapore under the supervision of the Colonial Office in London.

The Federated Malay States combined of Perak, Selangor, Negeri Sembilan and Pahang with their federal administrative centre at Kuala Lumpur, a young city growing out of a tin-mining town.

Johore, Kedah, Kelantan, Perlis and Terengganu joined together as the Unfederated Malay States administered out of Johore. These states systems, while technically independent, they were placed under a Resident-General in 1895, making them British colonies in all but name.

Sabah, Sarawak in northern Brunei, fell in to the protectorship of the British and governed by the British North Borneo Chartered Company after another Anglo-Dutch treaty in 1891. These two states subsequently came under the British governor from Singapore in 1906.

These components made of the land boundary of today modern Malaysia (except for Singapore which broke out to be form as an independent country in 1962) (Emerson, 1964).

The British now was retaining solid footing in the Peninsula. The British set about creating an environment for economic expansion. The tin industry which had boomed in the 1840s continued to grow, especially after the British stopped charging duty on imported tin in 1853. The invention of steamship and the opening of the Suez Canal in 1869 further boosted exports of tin from the Malay Peninsula. The Industrial Revolution which was progressing in Europe brought another economic force to the Peninsula, rubber. By 1930 two thirds of the cultivated land on the Peninsula would be under rubber.

Malayan tin and Malayan rubber would dominate their respective world markets, and made the Peninsula one of Britain's most valued imperial possessions. The networks of paved road and rail established by the British formed the basis for a good infrastructure linking the entire Peninsula which otherwise had to be relied on its water traveling. Under the British observation (and widely accepted), the Malays (people) were lazy, unwilling to work for wages and therefore could not be considered a potential and reliable source of labor in the colonial economy (Andaya and Andaya, 2001). As a rule of thumb, the British believed, the rate of immigration and the numbers of Chinese settlers were a reliable index of economic progress, (Andaya and Andaya, 2001). Chinese immigrated labors were considered better adaptive with its demands. Chinese immigration bloomed in this era, pulled by the economic opportunities opening up and pushed by the difficult conditions in China. These new comers to the peninsula quickly

dominated labor forces in most tin mines by alliances under secret societies. These societies became powerful through controlling labor forces in existence but mainly through recruiting and shipping new workers from mainland China. Chinese activity in such areas as finance, transportation, construction, small scale industry and retail trading was also establishing a strong base for the area's economic future. The British had also recruited labor from Indian, its power base in Asia, to work on the growing number of rubber plantations (Andaya and Andaya, 2001). The 1931 census revealed that Malays no longer formed the majority in the total population of the Malay States and Straits Settlements (Emerson, 1964). Divisions between Malays, Chinese and Indians, already culturally profound, were deepened by British policies. This would be the reason for much of social unrest later in Malaysia.

This era also marked the urbanization of Malaysia, especially on the south and west areas of the Peninsula. Large cities and towns were found on the west coast, where Chinese and Indian formed a large proportion of their population, whereas the east coast was still largely rural with the indigenous Malay population being in the majority (Salleh & Choguill, 1992).

World War II broke out in Europe and stretched to the Pacific Ocean. The British Malaysia was caught off guard by the Japanese force on December 1941 and within 3 months the Peninsula fell into the hand of the Japanese Imperial. After over three and a half years of occupation, the Japanese was driven of Malaysia by the British after the end of World War II.

When returning in 1945, the British faced a devastation of the pre-war economy and a much more racial divided population. Their protector ship or rather dictator ship

was not accepted by the people of the Peninsula as it had been before they were driven off by the Japanese. Furthermore, recreating the colonialism in the Peninsula was not in the British agenda. It was inevitable for the British rule, because its home country was severely damaged after the Second World War and the country was putting all of its efforts to rebuild its glory. Immediately after relinquishing its Asian Power post in India and returning the sovereignty back to its people in 1948, the British set out to create the Malay Union under a Governor with full executive powers (Miller, 1966). The main objective of the plan was to combine the Federated and Un-Federated Malay States, plus Penang and Malacca (the Malacca Settlements) into a unitary state, with a view to independence within a few years. There would be a common Malayan citizenship regardless of race. The British plan to create the Malay Union was forced to abandon after facing vigorously opposition from the Malays on the fact that the Chinese and Indians were to be a permanent and equal part of Malaya's future. The United Malays National Organization (UMNO) which was swiftly formed to represent all Malay sultans and their interests became the most vocal and forceful objection to the plan. The Chinese also got into action with the creation of the politically conservative Malayan Chinese Association (MCA). The Malayan Indian Congress (MIC) was also formed to represent the Indian community. However, UMNO did favor independence for Malaya, but only if the new state was run exclusively by the Malays. In subsequent talks, UMNO agreed with the British for the establishment of a new federal administrative structure, which offered citizenship for non-Malays who filled certain strict criteria. The British governed Federation of Malaya was launched in February 1st 1948 (Purcell, 1965). This federation was subsequently become the Federation of Malaysia.

Similar to most Asian countries immediately after the Second World War, Malaysia was rolled into the Communist waves. Shortly after the creation of the Federation of Malaya in 1948, the Communist Party of Malaya (CPM) which had been founded during the Japanese occupational period attempted revolution, started the uprising with the purpose of creating a Communist State using the same guerrilla warfare tactics as it had fought with the Japanese. The British declared a state of emergency and developed counter-insurgency policies which, crucially, won the support of the majority of the population. By the early 1950s CPM terrorism had been reduced to a minor problem, though emergency regulations were not lifted until 1960. One permanent result of the Emergency was a highly centralized federation, all Malay states volunteered to relinquish most of their sovereign powers so that the crisis could be handled efficiently (Purcell, 1965, Andaya & Andaya, 2001). During the Emergency the British promised self-government for Malaya, though at the time it was not clear how this could be achieved in a way acceptable to all communities. However, attempts to establish multi-racial political parties met with little success. Beginning in 1952, a formula for potentially stable self-government was worked out through the forming of a new political front. This was the Alliance, a coalition of three communal based parties; UMNO, the largest and best organized party in Malaya represented the Malays along with the Chinese MCA and the Indian MIC. This coalition reached agreement in 1954 for a national election day in 1957 that mark the handover of British power and the birth of a new nation, Malaysia. During 1955 and 1956 UMNO, the MCA, the MIC (though at a limited scale) and the British hammered out a constitutional settlement with the anticipation of equal citizenship for all races. Under the new constitution, Malaysia's head of state (king)

would be drawn from the ranks of the Malay Sultans, the Chinese and Indians would have proportionate representation in the Cabinet and the Parliament under the executive power of the elected Prime Minister. The structure of the new democratic parliamentary system and its legal system were broadly derived from British models.

On August 31, 1957, Tunku Abdul Rahman (whose full name was Tunku Abdul Rahman Putra Al-Haj ibni Almarhum Sultan Abdul Hamid Halim Shah (1903-1990)) was elected the first Prime Minister of the independent Malaysia and an independent member of the Commonwealth of Nations. .

Independence to the Present (1957- Now)

It was fortunate that Federation of Malaya achieved its independence with little bitterness and even less bloodshed (Tregonning, 1964) comparing to its neighbor states such as Indonesia (from the Dutch), the Philippines (from the Spain) and the Indochina (Vietnam, Laos and Cambodia from the French). However, this young country had endured much turbulence over the next decade to establish its sovereignty and finalized its border, namely:

1961, Prime Minister Tunku Abdul Rahman formed the Federation of Malaysia, The creation of the Federation of Malaysia was set to come to existence on August 31 1963. It was the accession of the existing Federation of Malaya, Singapore and three territories in Boneo: North Boneo, Sarawak and Brunei with its federal capital in Kuala Lumpur (Gullick, 1963).

1963, September 16th, the Federation of Malaysia became a full member of the United Nation with its official name shorten to Malaysia.

1965, August 9th, Singapore was peacefully separated from Malaysia to establish its own nation under the leadership of Lee Kuan Yew.

One of the most important effects of the formation of Malaysia in 1963 was that it created a neutral name for the country distinct from that of its core ethnic Malay (Reid, 2001): Malaysia instead of Malaya, but not without the definite position of the bangsa Melayu at the core of education and government services. Malaysia is comprised of such a diverse mix of immigrant groups, except for the Orang Asli who is considered the aboriginal people of the land. The three biggest races of Malaysia, the Malay, the Chinese and the Indian are all immigrant to the country. Thus, a dilemma the country faced with independence was determining its national identity. The Malay dilemma as often mentioned by historian is the right to claim ownership of Malaysia over all races. The Malays claimed the rightful ownership based on the fact that they were the first ethnic group to establish an effective and recognizable government on the peninsula in the form of the Malacca Sultanates. Even under colonial eras; the Malays had been able to maintain functioned governments, though with limited powers over their own lands; a reality other immigrant groups simply did not achieve (King, 2008).

Malays have dominated the country's government and civil service since independence in 1957, but they lag well behind their Chinese counterparts in terms of average incomes and economic clout. The newly independent Malaysia, despite inheriting the favorable economy from the British colonial, was still a third-world country raging by poverty.

Transforming the Economy

Facing the fact that over 50% of its country household lived below poverty line, of which 75% were Malay, Prime Minister Tunku Abdul Rahman set out the first Malaysia Plan (1966-1970) with the purpose of eradicating poverty and advancing the country economy. The government invited foreign investors to establish import-oriented

manufacturing sectors in Malaysia. This plan enabled to reduce its dependency on imported goods and improve the national economic performance (Shatkin, 2007), as well as provided new sources of employments for its country men. This first five year plan which heavily favored the Malays by imposing quotas on employments (as well as education eligibilities) led to the growing ethnic tensions over the period. This disparity grew out of proportion toward the end of Tunku Abdul Rahman premiership. The ethnic disturbances after the May election in 1969 between the Chinese and the Malay resulted in the state of Emergency after hundreds of people were killed and injured. Prime Minister Tunku Abdul Rahman resigned was replaced by Prime Minister Abdul Razak in 1971, who led the country until 1976. Immediately after having controlled of the highest Office, Mr. Razak embarked the New Economic Policy (NEP) set the frame work for the next four Malaysia Plans with two principal objectives:

- A reduction and eventually eradication of poverty, irrespective of race;
- A restructuring of society so that identification of race with economic function would be reduced and ultimately eliminated (Andaya & Andaya 2001).

However, Malaysia economy, as a whole, would not gain any significant economic progress of until the era of the fourth Prime Minister, Dr. Mahathir Mohamad, who became into power in 1981 and ruled Malaysia with iron fist until 2003. Dr. Mahathir picked up the ongoing series of five-year plans, and which had begun in 1966, known as the “Malaysia Plans” to better the existing economy. Under his premiership, Malaysia has made tremendous strides in their growth and wealth. This period marked a shift from an agriculture-based economy to one based on manufacturing and industry in areas such as computers and consumer electronics. Immediately after the economic recession of 1985, the Mahathir’s administration set courses to enhance the

manufacturing industries with a series of Industrial Master Plans. The plan introduced generous incentives, tax relief and subsidized investment loans to stimulate the development of foreign direct investment and to develop small and medium industries (Asgari & Yuan, 2007). These plans achieved significant results especially in pushing the share of manufacturing in export from only 20% in 1980 to 75.9% in 1996 (Rasiah, 2005, quoted in Asgari et al. 2007). In 1990, the government decided to develop the industrial technology and formulated the Action Plan for Industrial Technology development (APITD) to upgrade labor-intensive manufacturing to capital-intensive, high technology, and skilled-intensive sectors to increase added value (Lai & Yap, 2004). This APITD is the framework for the massive development of the Multimedia Super Corridor in the Kuala Lumpur Metropolitan Area in the mid of the 1990s.

It was during this period, too, that the physical landscape of Malaysia has changed with the emergence of numerous mega-projects. The most notable of these projects are the Petronas Twin Towers. Dr. Mahathir had ruled Malaysia for 22 years until retiring in October 31st 2003 as one of Asia's longest serving Prime ministers. Throughout his term in office, Dr. Mahathir turned Malaysia into a regional high-tech manufacturing, financial, and telecommunication center through his economic policies based on corporate nationalism. Dr. M., often dubbed as the Lee Kuan Yew of Malaysia, is credited with leading the phenomenal growth of the Malaysian economy, now one of the largest and most powerful states in South East Asia. Growth between 1988 and 1997 averaged over ten percent and living standards rose twenty-fold, with poverty almost eradicated and social indicators such as literacy levels and infant mortality rates becoming on par

with developed countries. During this period, Mahathir embarked on various large scale national projects, such as:

- The Petronas Twin Tower, the tallest twin towers in the world, a representational icon of modern Malaysia;
- The North-South Highway, along the west coast of Malaysia;
- The Multimedia Corridor, a mega project derived from Silicon Valley concept of the USA to enable Malaysia's endeavor into information technology (it includes Malaysia's new administrative center, Putrajaya- which is the reason for this thesis),
- Kuala Lumpur International Airport (KLIA) south of Kuala Lumpur, Asian largest airport,
- The reconstruction of Malaysia education system,
- The Perwaja Steel project,
- Olympic-class stadium in Bukit Jalil,
- Port of Tanjung Pelepas,
- Proton car, the national car company,
- Astro, the nation's satellite television and Asia's largest internet search engine; and many more.

After 52 years as an independent nation, Malaysia is now on its way to transform itself from a third world country into a developed nation by 2020 as set out by its government during the sixth Malaysia Plan (1991-1995), known as Wawasan 2020 (Vision 2020).

APPENDIX B.
KUALA LUMPUR AND THE KLMA

Kuala Lumpur, Malaysia's Megacity

In Malay, Malaysia's official language, Malaysia capital city, Kuala Lumpur, literally means "muddy confluence" or "muddy jetty". The name was derived from its physical location - the confluence of the Klang and Gombak Rivers (Bunnell, et al, 2002). Kuala Lumpur has geographic coordinates: 3 10 N, 101 42 E with the time standard of UTC+8 (13 hours ahead of Washington, DC during Standard Time). Kuala Lumpur was established in 1850s after tin, the country's major export metal during colonial era, was found nearby on the Klang Valley. Thanks to the flourishing tin mines, Kuala Lumpur soon became a trade post and attracted scores of immigrants to the valley; mostly among them were the Chinese. Rubber plantations and palm-oil estates sprung up around KL, owing to the flat plain and favorable climate of Klang Valley. Within 40 years, Kuala Lumpur had been recognized as the frontier town of the Peninsula; it became the capital town of the Selango State in 1880, and in July 1896, Kuala Lumpur was chosen as the administrative center of the newly formed Federated Malay States (FMS). It was also the seat of the British Resident General with jurisdiction over all other Residents within the FMS prior to the Mederka (independence) in 1957 (Andaya and Andaya, 2001). Kuala Lumpur was achieved city status in 1972 and two years later became a Federal Territory on February 1st 1974 after the Sultan of Selango ceded the 243 square kilometers of the city to the Federal Government (Bunnell et al., 2002).

The centralization of federally political authority within Kuala Lumpur has transformed this Capital City from a trading town to a primate city of the country and became an emerging node of the network of global cities. Ever since its inception, Kuala

Lumpur had been seen as a Chinese town, despite the Malay presence in civil services; by 1891, Kuala Lumpur recorded a population of 43,785, with 79% were Chinese (King, 2008). At the time of Independence Kuala Lumpur was a town of some 316,230 people, plus over 100,000 distributed across its adjoining settlements. The considerable majority was Chinese and the local economy was Chinese-dominated. Since the independence, Kuala Lumpur has to manage several waves of rural-urban migrants, mostly Malay. The ethnically proportion eventually balanced between the Malay and the Chinese over the next decades. According to the latest Malaysia Census of 2000, the Bumiputra (a term widely used in Malaysia to embrace the Malay and its indigenous people, the *Osang Asli*) was composed 38% of Kuala Lumpur population, where the Chinese at 43%, along with the Indian at 10% (Malaysia, 2000). Whereas the Malay has held most political powers, the Chinese still represents a significant force on the city's economic. The ethnic disturbances of May 1969, begun in Kuala Lumpur and spreaded to the entire country until 1970, were the result of this (Andaya & Andaya, 2001).

After Independence, no task was more urgent than to energize the Malay's claim to the national capital and thereby the nation (King, 2008). Government building project such as the Parliament House, Ministry complexes, National Museum, National Mosque and iconic monuments were built in an unprecedented speed. The Kuala Lumpur Structure plan of 1984 marked a significant Malay rural-urban migration. Thousands of housing units were developed along with new infrastructure and the second wave of erecting governmental buildings.

Kuala Lumpur became the global city. Shatkin (2007) pointed out the cross-nation similarities in patterns of urban development to build the tallest building, the sleekest rail

system, (and/) or the most impressive airport, in an effort to draw attention to their global linkages. Kuala Lumpur was not an exception, with the Petronas Twin towers once the world tallest building structure and still retains the title in the twin towers category, the flashy rail systems and the expensive modern airport Kuala Lumpur International Airport. While Kuala Lumpur quickly transformed itself from a trading town into a global commercial hub, the Kland valley surrounding the city also was also erasing its images of agriculture and mining and joining the urbanization frenzy.

There is no evidence to claim that Kuala Lumpur was carefully planned, but rather the self expansion of the city over its existence. The morphology of Kuala Lumpur is an unending labyrinth without order, axes or recognizable grid. Professor and author Ross King (2008) observed Kuala Lumpur is a city of great landmarks, but they constantly disappear and reappear as the roads twist.

Base on the research of Reyner Banham in his book Los Angeles: Architecture of the four Ecologies published in 1973, King (2008) saw Kuala Lumpur as the city with three ecologies. The first is the dense, seemingly opaque, horizontal labyrinth of the Chinese towns; the second is the loose, dispersed space of kampong- the Malay traditional settlement, linked in both its structure and its imagery to a Malay rural world. And, the third is the expansive, hierarchically ordered, administrative town from which the British were formally departing and to which the Malays, or at least their elite, were to lay claim. These differentiated ecologies along with the ethnical dispersion and maybe the distinctive architectures compose the sense of differentiated identities to the city. Among the dominant Malay-Chinese mix is the characteristic of the Indian community. The Indians are the smallest of the three major communities in Kuala

Lumpur, with neither the political power of the Malays nor the economic dominance of the Chinese. Consequently they are often overlooked and considered to be adapters to the other two.

Like other Southeast Asia metropolises, Kuala Lumpur does not have a concentrated city center or downtown as modern western cities especially those in North American. This capital city consists of a diversity of nodes of differing functions and significances. Kuala Lumpur City Center (KLCC) and Kuala Lumpur Sentral (Malay for Central) are two of those nodes but without the meaning their names implied. KLCC with its indoor shopping mall at ground level and the adjacent Convention Center is hardly a center for its residents, but as an iconic center often visited by tourist and usually crowded only on holidays and events at the convention center. KL *Sentral*, on the other hand, is the city transport interchange for four separate urban rail systems: the KLIA Ekspres, the KTM (National Railways) Komuter, the PUTRA LRT (Light Rail Transit) and the KL Monorail (like the PUTRA LRT, elevated above the city's street system). The 1984 Structure Plan was put in place not only to combat housing shortage and improve the aging infrastructure systems, but not without the agenda to enhance the doctrine of the Malay bangsa: to take ownership of which had been dominated by the Chinese.

As Kuala Lumpur proceeds with its globalization, once-dominant traditional Chinese shop-houses were replaced by modern department stores and flashy mega-malls crowding interchanges of highways and major streets. Or, one can say that these shop-houses have transformed themselves into mixed-use skyscrapers, with retails and offices on the lower floors and residential above. Kuala Lumpur today possesses one of

the better skylights in the world. According to Emporis.com, KL skyline ranks 17 in the world, 2 spots better than Miami's and a good 21 points more than that of Los Angeles.

The congestion and flooding saw little of improving, if not increased at the turn of the 20th century. King (2008) observed that something has to move out. The something, it was decided should be the Federal Government administration. I would agree that the move is not to release KL with current problems, but to eventually build a new a new capital that purely Malay, the option that can never be achieved in the Chinese influent Kuala Lumpur. Today, with the emerging of Putrajaya, Kuala Lumpur is still the country capital with its parliament and figurative King Palace, but most of government departments are promptly occupied and operated in the Administrative center Putrajaya. It can be safe to say that it is a matter of time that Putrajaya can retain the full function of a capital city as it was designed.

Kuala Lumpur Metropolitan Area (KLMA)

Like many of the metropolises in North America, the Kuala Lumpur Metropolitan Area (KLMA) is a sprawling region combined by many cities and townships mostly developed within recent decades. The industrialization and urbanization of the Klang Valley along with the population exploded led to the establishment of many urban centers. The rural-urban transformations were often easily facilitated thanks to the massive sizes of rubber and oil palm plantations previously existed within the vast valley. The population growth of Kuala Lumpur in the later half of the twentieth century led to a series of expansion of the city, new townships and planned community mushroomed horizontally on all direction of Kuala Lumpur. Over 40 new town and urban centers including, Bangsa, Petaling Jaya, Bandar Tun Razak, Wangsa Maju, Shah Alam (new capital of Selango state after given up Kuala Lumpur to the Federal

government in 1974), Bangi and Subang Jaya (Dasimah, 2001). The expansion of Kuala Lumpur Metropolitan Area, however, (Bunnell et al. 2002) was without diluting the significant of the Federal Territory, but reaffirmed Kuala Lumpur's nation centrality, thanks to the concentration of governmental services and economic focus in Kuala Lumpur.

One of Kuala Lumpur Metropolitan Area's former crowns is Petaling Jaya, which was planned and developed in the 1950s, modeled after the British's Abercrombie (King, 2008: 71). Built as a planned city west of Kuala Lumpur along the route of the railway and road down the Sungai Klang Valley, Petaling Jaya is now engulfed by Kuala Lumpur as a capital's precinct rather than an independent satellite city as it was designed to be. Bukit Bintang, Bangsa, Bukit Tunku, areas once less desired of Kuala Lumpur are now transformed into upper class townships thanks to scarcity of available land and the modern highway systems combined with the efficient train networks. Onto the 1990s, Kuala Lumpur became the mega city of Malaysia in terms of size and economic power. Kuala Lumpur also became one of the most important metropolises in Southeast Asia.

The Kuala Lumpur Metropolitan Area today has stretched westward to Klang Port and southward beyond the Klang Valley to the Sepang region to engulf the Kuala Lumpur International Airport completed in 1998. The decade of 1991-2000 was considered the breaking-point for this most important metropolis. Driving on the successful of the Petronas Twin-towers, the Malaysia government, under the premiership of Dr. Mahathir started a series of mega-projects in Supang adjacent to the Klang Valley: The Kuala Lumpur International Airport (1992), Administrative capital

Putrajaya (1994), Information technology central city Cyberjaya (1994), which later combined into the gigantic Multimedia Super Corridor (MSC) in 1996.

KLMA today is a brawl region combining all of the Kland Valley and the Sepang district. Besides being the home of Malaysia most important territories in term of political influences, but also the nucleus of the country’s economy in the globalization age. The centralization of the most important seaport, airport and the majorities of modern-age industries makes this region a employment magnet for its country men. This region now is home of an estimated inhabitants of over 8 millions people (World Gazetteer, 2010). This figure represents the explosion of population, almost twice of that a decade ago.

Chart of KLMA population growth.

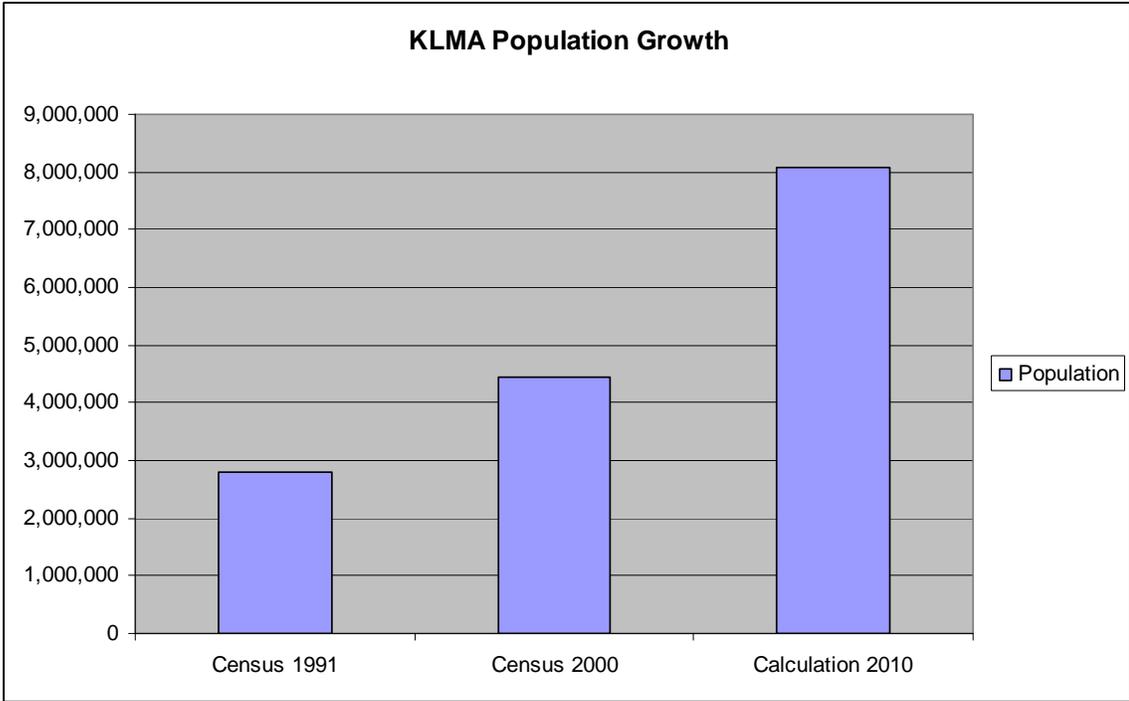


Figure B-1. KLMA population growth. Author.

This phenomenal population growth, the result of its continuing role of dominating industrial, commercial and service industry in Malaysia (Wahab, 1990) is seeing no sign

of slowing down. Dr. Mahathir, in his speech on August 29th 1995, projected that this KLMA region would one day become one mega-city that can be compared to centers like Tokyo-Yokohama of Japan.

APPENDIX C.
THE MULTIMEDIA SUPPER CORRIDOR

Wawasan 2020

In 1991, Dr. Mahathir Mohamad, who began his third term as the country Prime Minister, formed the Malaysian Business Council with himself as the sitting chairman. At the inaugural ceremony of the Council in Kuala Lumpur on February 1991, Dr. Mahathir presented the paper titled “Malaysia, the Way Forward”. The main purpose of this paper was to sell to the Malaysian his administration’s vision for the country in the year 2020. Called Wawasan 2020, or Vision 2020, the Prime Minister Mahathir set out the future course of Malaysia: to transform Malaysia from a third world country into an industrialized and developed country within 30 years.

At the very second paragraph of the paper, Mahathir Mohamad (1991) asserted: “Hopefully, the Malaysian who is born today and in the years to come will be the last generation of our citizens who will be living in a country that is called 'developing'. The ultimate objective that we should aim for is a Malaysia that is a fully developed country by the year 2020.”

**The MSC Vision:
the 25 year plan to 2020**

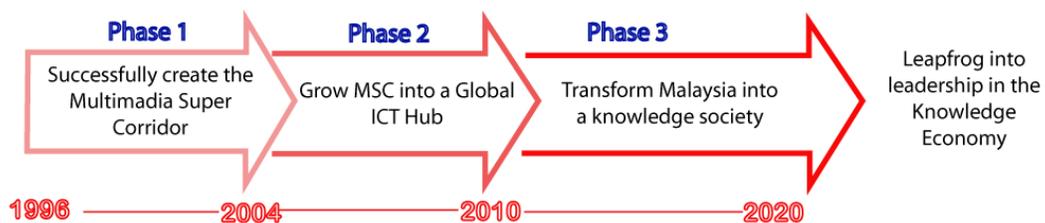


Figure C-1. The Vision 2020, Author.

Along with the argument that Malaysia economy could no longer rely on traditional exports of raw materials, Dr. Mahathir also emphasized Malaysian then

economic weakness: narrow manufacturing base and its dependency on imported components. He firmly stated that Malaysia needed to develop a competitive economy that was able to produce a growth rate of 7% per year and sustained for the next 30 years. Dr. Mahathir also confirmed his administration commitment both in terms of policies and monetary to transforming the economy.

The information technology (IT) and later engulfed in the Information and Communication Technology (ICT) had been identified as key sector to realize the Vision 2020. Dr. Mahathir (1991, p. 20) charged: "In the information age that we are living in, the Malaysian society must be information-rich. It can be no accident that there is today no wealthy, developed country that is information-poor and no information-rich country that is poor and undeveloped". Since then the government of Malaysia has emphasized the importance of IT for the country's economic development and has implement several policies for a more effective and efficient economy. In order for the country to become a developed country by 2020, the Malaysian government has taken strong initiative and introduced a strategic policy package which officially incorporated into the Six Malaysia Plan, the five-year period of 1991 and 1995 (Nakagawa, 2000, Aslam 2000). However, a bold policy and necessary infrastructure and environment for the development of ICT were developed during the Seven Malaysia Plan (1996-2000).

According to the research of Roger Harris (2002), the MSC arose out of the proposal made to the Prime Minister of the time Dr. Mohamad Mahathir and the National Information Technology Council by the international consultant firm McKinsey & Company. The proposal asserted that the nation's development strategy, which targeted manufacturing, imposed a ceiling on potential Gross Domestic Product (GDP)

far below that which was envisaged by the Wawasan 2020. By developing information industries and by leapfrogging into the Information Age, Malaysia's GDP potential would be greatly enhanced, along with achievement of the country's development target. McKinsey also indicated that ... "Malaysia could attain world status in multimedia industries within five years through carefully planned strategies and urgent action, thereby transforming itself into a knowledge-based society and harnessing the power of information as a springboard for socio-economic advancement" (Harris, 2002). From the outset, the conceptualization of the MSC was transnational. The Malaysia's government set up an International Advisory Panel comprised of an impressive list of the world's leading IT experts, consultants and academic to advise the Malaysian government on strategic issues. Bill Gates, chairman and CEO of Microsoft, is one of the Panel members, who have met privately on several occasions with Dr. Mahathir to advise him on the development and implementation of the MSC. Other luminaries such as Louis Gerstner of IBM, Gilbert Amelio of Apple, Sir Peter Bonfield of British Telecom, and Noboru Miawaki of Nippon telegraph and Telephone are among 41 that made up the panel (Mee, 2002). Please see the Appendix B for a complete list of this International Advise Panel.

The Malaysia Government also recognized its important role in this endeavor; the major player in developing the world-class IT and telecommunications infrastructure. The government could not rely on private industries and investors to come up with such massive investment which did not guarantee immediate return. As a result, the Malaysia government under the premiership of Dr. Mahathir created and developed the multi-billion dollar urban mega-project called the Multimedia Super Corridor. In August 1st,

1996 the government had initiated and established the Multimedia Super Corridor (MSC) in the Klang Valley south Kuala Lumpur and subsequently formed the Multimedia Development Corporation (MDC) to manage the project (Aslam, 2000). The initiative of the MSC came with two major ambitions:

- The first is to transform the Malaysia economy from one of manufacturing and primary commodities to software and services.
- The second is to create an inviting environment for global ICT firms to use as their regional head-quarters and test-bed. And, as a result the MSC is to become the mechanism for highly competitive cluster of home-grown ICT companies that can become world-class overtime (Zainuddin, 1997, cited in Bunnell, 2002).

Dr. Mohamad Arif Nun, the first CEO of the MDC, the government controlled corporation that operated the MSC, offered the two visions of the MSC. Firstly the MSC would serve as a regional hub in a borderless world, for the co-ordination and support of global manufacturing. Secondly, the MSC would be the center for development of multimedia products and services, with a particular focus on Asian market (Mee, 2002). Dr. Arif went on to express his optimism about the direction of the MSC as the test-bed for the future reorganization of Malaysia society. It is a precinct where futuristic information technology products and services can be trialed before extended throughout Malaysia (Mee, 2002).

Regional Planning, the MSC

Geographically, the Multimedia Super Corridor is a 15km by 50km immediately south of Kuala Lumpur. The MSC is symbolically framed by two gateways: the Petronas Twin towers and the Kuala Lumpur International Airport at its southern end.

The MSC is a project spanning over 20 years, which envisions Malaysia achieving leadership in the Information Age. The project comprises three phases:

- Phase I includes attracting world-class companies to set up their operations in the MSC, launching of seven flagship applications including electronic government and telemedicine, as well as the establishment of the two intelligent cities, Putrajaya and Cyberjaya;
- Phase II concentrates on creating networks between the MSC and other clusters in the country, attracting more companies and implementation of further flagship operations;
- Phase III will see the culmination of Malaysia as a knowledge-based society, a home for a large number of multimedia companies, with a host of cities linked to the global information super highway (Ramasamy, Chakrabarty, & Cheah, 2003).

Thanks to the vast amount of fund provided by the national petroleum company, Petronas, and the government ability to draw funds from it. The developing of the MSC from the onset has been in an unprecedented speed. The role of the government in the development and growth is expansive. The primary role has been in setting policies for the development of the MSC, its companies and its required resources. This includes various incentive plans, which include facilitation in the setting up and operations of MSC companies. As clearly stated in the MSC official website (<http://www.msc.com.my>), the government has instituted various incentives for MSC status companies backed by 10 Bills of Guarantee.

Financial incentives

- A five year exemption from the Malaysian Income tax, and renewable to 10 years or a 100% Investment Tax Allowance,
- Duty free importation of multimedia equipment
- Eligibility for R&D grants for majority Malaysian owned MSC companies,
- Freedom to source capital globally for MSC infrastructure development (access to funds globally is restricted to applicants with MSC status located within the MSC boundaries).

Non-financial incentives

- Unrestricted employment of foreign knowledge workers for applications with MSC status irrespective of location
- Freedom of ownership for businesses within the MSC while companies outside the MSC boundaries with MSC status have to abide by the 30% Bumiputera (local Malays) participation rule,
- Intellectual property protection and comprehensive framework of cyber laws to be enjoyed by MSC status companies irrespective to location,
- The provision of world class physical, IT, and telecommunications infrastructure,
- Complete Internet access, free of censorship,
- High quality planned urban developments including a green environment,
- R&D facilities

The premier support services provider in the MSC is the Multimedia development Corporation (MDC), a government owned corporation established in 1996 to systematically oversee the implementation and the development of the MSC. It serves as a “one-stop” center for companies applying for MSC status. It provides the MSC companies with client services in addressing the unique concerns of these companies in areas such as training and developing of the workforce, legal advice, grants and other funds as well as issues relating to licenses and approval for various business activities. It also facilitates the collaborations between local and international companies; oversee the development of flagship applications, sets up incubation centers and the infrastructure that provides venture capital and public listings for smaller companies. It also plays a very important role in the implementation of the Bills of Guarantees of the MSC, the development and updating of Cyber laws and policy formulation of the MSC set up. The Malaysian Venture Capital Management (MAVCAP) was established to lead the government’s efforts in encouraging start-ups. The government set up a venture capital fund of around RM500 million annually for venture companies involved in ICT.

These funds are available at zero interest rate for durations up to 10 years (Ramasamy et al., 2003).

With Kuala Lumpur city adjacent to the MSC, and the short commuting distance between clusters due to excellent road and train networks, MSC firms are able to avail themselves to the legal, financial and corporate infrastructure in existence within the city center. Transportation networks within the MSC have been enhanced by road linkages in the form of the KL Seremban Highway, the North-South Central Expressway Link, the South Klang Valley Expressway and the Damansara Puchong Expressway. Railways and light rail transit system which had planned and developed since 1991 provide an alternate means of transportation connecting all sector of the MSC and regions surrounded. Malaysia largest port, Port Klang is also located within 40km of the core of the MSC.

Below is the description of the Malaysia Government of the MSC:

- The Multimedia Super Corridor (MSC) is a gift from the Malaysian government. A gift to technology developers and users seeking to deliver high-value multimedia services and products to customers across an economically vibrant Asia and the World, to Malaysians wanting their country to prosper, and to neighboring countries aspiring to partner with technology hub.
- The MSC will be the first place in the world to bring together all elements needed to create an environment that engenders truly mutual enrichment for all kinds of IT/multimedia companies.
- The MSC will bring together four key elements:
 1. A leading-edge soft infrastructure, including highly attractive incentives, unrestricted import of foreign knowledge workers, the world's first comprehensive framework of 'cyber-law', world's first Multimedia Convergence Act, and a sharper focus on multimedia education.

2. A world-class IT network consisting of a high-speed backbone, and the most cost-competitive telecommunication tariffs offered to MSC companies.
 3. The Multimedia Development Corporation as a high-powered, one-stop shop that is empowered to ensure that companies interested in the MSC get what they need to succeed by providing information and advice on the MSC, and assisting in expediting permit and license approvals.
 4. A top-quality development in Cyberjaya, Malaysia's first major MSC-designated Cybercity designed from the ground up.
- Malaysia welcomes the advent of the Information Age with its promise of a new world order where information, ideas, people, goods and services move across borders in the most cost-effective and liberal ways.
 - As traditional boundaries disappear, and as companies, capital, consumers, communications and cultures become truly global, new approaches and attitudes to business are required. Malaysia upholds the virtues of the new world order, believing that the globe is collectively moving towards a "century of the world", a century of world-wide peace and shared prosperity among nations.

The Malaysia government back up these claims by the ten-point Bill of

Guarantees and the amenities in the MSC zone:

- 100% digital fiber-optic back-bone (by 1998): 2.5-10 Gigabits per second (Gbps)
- High-speed fiber-optic links to the rest of the country
- Fiber-optic links to Asian, Japan, the EU and USA: 5 Gbps
- Menara KL (Kuala Lumpur Tower)- Asia's tallest telecommunication tower.
- Kuala Lumpur International Airport (KLIA)- Asia's largest airport
- Kuala Lumpur City Center (KLIA) with the Petronas Twin towers
- IT cities with a minimum population of 16,000 of knowledge workers

- South Klang Valley Expressway, Putrajaya Urban Motorway, and North-South Central Link Highway
- Express rail Link (ERL), a committed rail alignment linking KLIA, Putrajaya, Cyberjaya and the KL Sentral Station in Kuala Lumpur within 29 minutes.
- World-class academic institutions capable of providing a steady stream of knowledge workers.

The MSC is the brainchild of the former Prime Minister Mahathir Mohamed and his administration (Ramasamy et al., 2003). The MSC can be seen as the urbanization/modernization of the vast area between Kuala Lumpur and the Kuala Lumpur International Airport. This urban area is developed as a test bed based in the IT/ICT to advance Malaysia into the Information Age.

The development of the MSC vision is carried out in three phases as indicated in below diagrams.

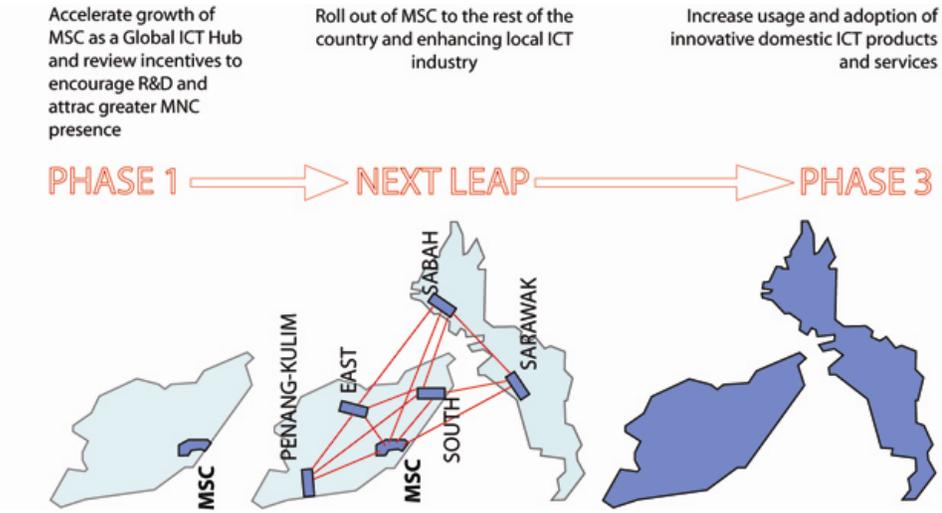


Figure C-1. MSC’s development strategy. Author.

The strategy for the first phase of MSC vision was to build the Kuala Lumpur International Airport 50 kilometer south of Kuala Lumpur City Center (KLCC), upgrade and build the transportation systems to link the two spots, and subsequently build

CyberJaya, Putrajaya and Industrial Park in between. In the planning perspective, the MSC is subdivided into seven planning areas as outlined below:

- KLIA Kuala Lumpur International Airport
- Airport City,
- Putrajaya,
- Cyberjaya,
- Cyber Village,
- Tele-Suburbs,
- Research and Development Centre and High - Tech Parks.

Of the seven components above, The KLIA, Putrajaya and Cyberjaya were developed prior to the MSC master-plan and incorporated into the grand scheme in 1996. Kuala Lumpur International Airport and Cyberjaya are the two most important apparatus of the MSC.

Kuala Lumpur International Airport

In order to globalizing Malaysia, a starting point had to be in place. For all purposes, Kuala Lumpur, the federal territory, was the best local point the country had to offer. Kuala Lumpur, through gained recognition worldwide with the completion of the Petronas twin tower in 1988, was still stuck with an outdated gateway, the small Subang airport built in the colonial time. Kuala Lumpur was sandwiched between the two prominent transportation and business hubs; Bangkok, Thailand and the city-state Singapore. The modernization of the north-south rail and tolled highway systems linking Singapore and Thailand, strategically passed through Kuala Lumpur were helping to reposition its thriving economic hub at the regional scale. Both Changi airport (Singapore) and Don Mang (Thailand) have been popular airports connecting the East and the West. To become a global city with the capability to compete internationally, a new international airport had to be added to Kuala Lumpur. In 1991 a 10,000 hectare

track some 70 kilometers south of Kuala Lumpur City Center was purchased and started to develop the now Kuala Lumpur International Airport in 1992 (Bunnell et al., 2002). Designed by world renowned Japanese architect Kisho Kurokawa, the KLIA is often boasted as a spectacular feat of construction, combined futuristic technology, Malaysian culture and the rich, tropical splendor of its natural resources. In 1998 KLIA was officially replaced Subang as the airport of the capital city. The new mega airport, completed with the latest technology and state-of-the-art facilities, aims at providing maximum passenger safety, comfort and convenience. It is unique because it has within its boundaries all that are needed for business, entertainment and relaxation. In short, KLIA is a destination in itself.

The selection of the new airport site was made following site selection studies which required several primary criteria to be met. Requirements included:

- Sufficient land size for expansion
- Potential for access time from Kuala Lumpur within 30 minutes
- Strategic location near major towns in the Klang Valley
- Satisfaction of aeronautical requirements
- Suitability of infrastructure
- Minimal adverse impact on social and environmental issues

The airport is built on 10,000 hectares (25,000 acres - one of the world's largest construction sites) or 100 sq. km. of agriculture land once thick with rubber and palm oil plantations which makes it one of the largest airport sites in the world.

The master plan for the airport was conducted by one of Malaysia top firm Akitek Jururancang (Malaysia) Sdn Bhd (AJM).

KLIA was completed in four and a half years with round-the-clock construction work (making it the fastest airport ever built) undertaken by an international workforce of 25,000 people (largest number of workers for a Malaysian project) at a cost of about

US\$3.5bn and commenced full commercial operations on June 28, 1998. The large size of land designated for the airport would allow the airport to expand as needed to meet present and future air traffic demands.

From the air, the KLIA looks like a futuristic structure hidden in a remote jungle. Encircling the airport is a tropical forest. More than a million trees and shrubs are transplanted both within and outside the large Passenger Terminal Complex, according to the airport management authorities. With a rambling roof resembling white Bedouin tents, the five-level KLIA boasts the world's tallest air-traffic control tower, the biggest columnless hangar, the longest baggage conveyor belt system, biggest passenger lounge and the capacity for 25 million people a year. The airport has a Made-in-Malaysia, RM24 million Olympex flight information display system. (Department of Civil Aviation Malaysia, www.dcaklia.gov.my).

Malaysia is home to the world's oldest tropical rain forests. The KLIA is therefore often described as the "airport in the forest, forest in the airport", so flexuous would be the boundaries between the physical structure of the airport and its green ambience.

Every effort has been made to create a homely airport with a serene environment combined with high technology attractions. Nature and greenery will be part of the airport in line with the airport in the forest and forest in the airport concept. The natural environs of the airport will be transformed to functions and activities that continue to enhance nature. The architecture of all the new facilities will maximize the use of the forest concept and imagery with strategic locations designed with high standards of environmental performance in mind. The abundant forest areas are to be preserved and

transformed into an environment park containing recreational facilities. There will also be a golf course within the limits of the airport reserve.

Cyberjaya - The World's Intelligent City

Conceptualized as a model intelligent city of the world, Cyberjaya is the nucleus of Malaysia's strategic vision for the new economy, the Multimedia Super Corridor (MSC). Spanning an area of about 28.94 square kilometers (7,000 acres),

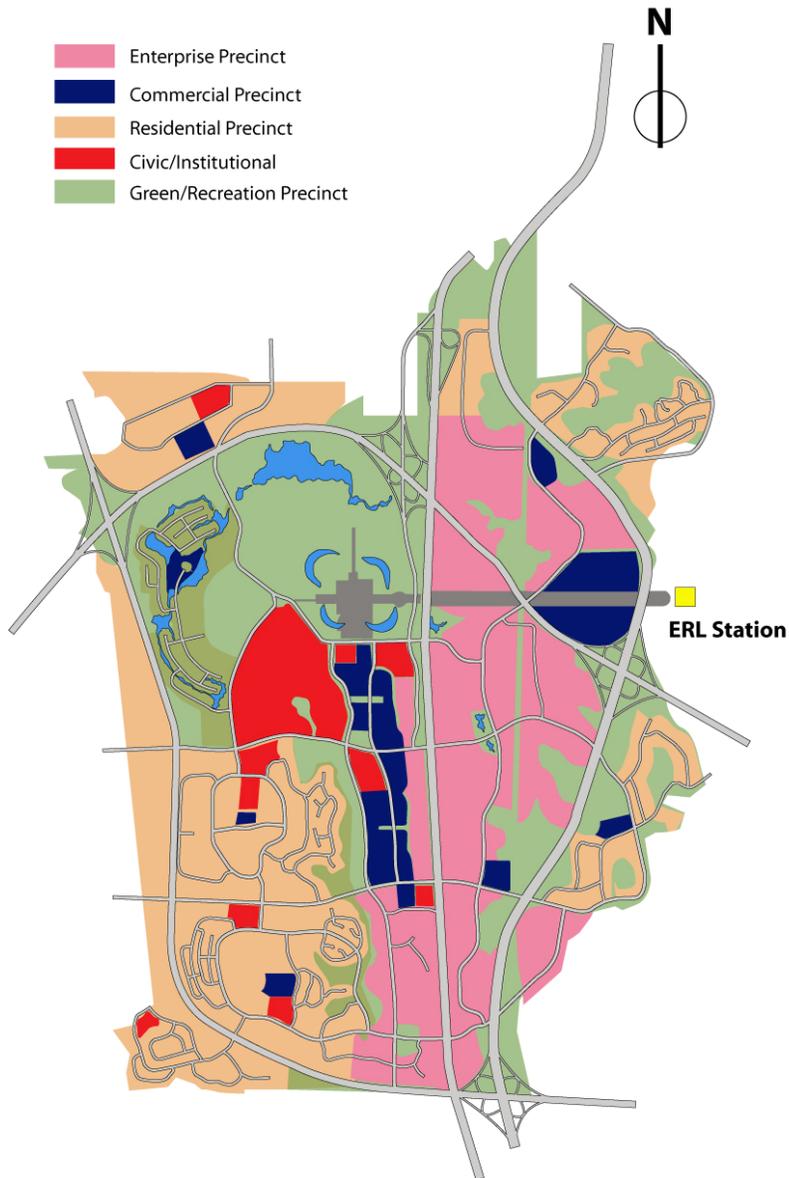


Figure C-2. Diagram of Cyberjaya. Author.

The development of Cyberjaya, and the MSC more generally, is governed by the Multimedia Development Corporation (MDC) which also locates its headquarter here. Cyberjaya is the twin city of Putrajaya but has a completely different function as its name implied. Modeled after the famed Silicon Valley of the United States of America, Cyberjaya is developed to be the 'technopole' not only for Malaysia but also for the Asia region (Bunnell, 2002, Bunnell & Coe, 2005).

The central theme for the development is providing a quantum jump in standards, summarized as follows:

- a leading edge multimedia centre that will attract world-class multimedia/IT companies;
- sophisticated and state-of-the-art integrated infrastructure and IT system; and
- sophisticated and efficient transportation systems with an emphasis on public transport

The development of Cyberjaya has been going at a rapid pace. World class IT infrastructure, such as a fiber-optic network, has already been laid. Major roads have been built, giving residents easy access to nearby cities. The Express Rail Link that connects KL Central and KLIA stops in Putrajaya which also has bus connecting to Cyberjaya.

Since its inception, a host of world-class companies had chose Cyberjaya as their regional center: the London-based HSBC, Ericsson, Fujitsu, DHL, Shell, Standard Chartered, Nokia, Hewlett-Packark and Intel were among the first (King, 2008). The MDC estimates that around 500 IT and multimedia companies will be located in Cyberjaya by the year 2020.

By the end of 2007, over 400 companies were taken residency in Cyberjaya. Most major companies are operating from their very own buildings, some established

their footings within single tenancy building, while smaller companies operate from the office buildings that have already been completed such as Century Square.

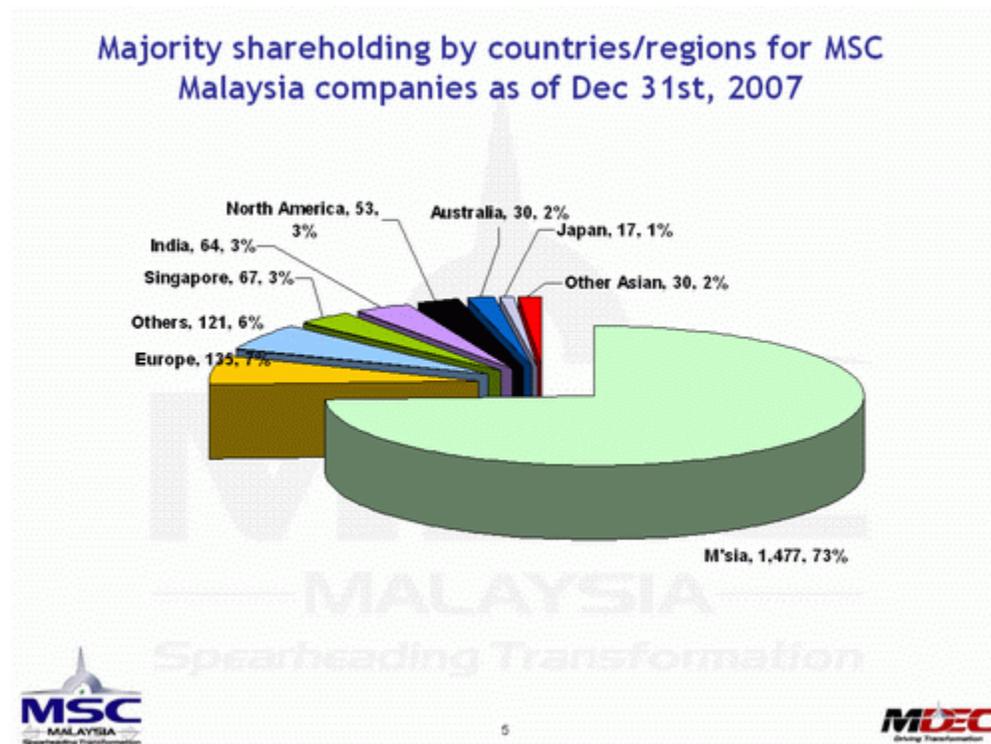


Figure C-3. MSC companies as of 2006. Source: MDEC (2008).

The population target for Cyberjaya is 240,000 with about 90,000 concentrate in the city's CBD. However the take-up residential pace of Cyberjaya has been slow due to many factors: the un-established urban atmosphere, availability of affordable housing, the relatively distance to Kuala Lumpur combined with the conveniences of transportation systems, and most importantly the economic crisis' of the late 1990s and 2008. As of the summer of 2008, my second visit to the city, Cyberjaya claimed to have a day population of over 30,000, but that number would fall to one-third of that amount as night fall. Cyberjaya has not achieved its intended township image, but more like an industrial park under construction. The town is car-dependent, straight architecture, shade-less and unlimited of red scars from the earth in vacant sites.

Some of the facilities that have already been completed and operated in Cyberjaya during the first development phase, 1995-2011:

- Multimedia University (MMU),
- Lim Kok Wing University College of Creative Technology,
- Century Square office blocks,
- MDC headquarters,
- Cyberview Lodge Resort and Spa,
- Several Enterprise Buildings,
- A smart school (K 12),
- CyberJaya Transport Terminal,
- Cyberpark,
- CyberJaya Central Incubator
- CyberJaya Mall.

Many other facilities are being planned and promoted such as a sports complex, Tele-Medicine Center and an 18-hole Golf Course to be entered into construction phase scheduled in 2011.

The rest of the MSC components; Airport City, Cyber Village, Tele-Suburbs and High-Tech Parks for Research and Development have being under construction at vary stages.

LIST OF REFERENCES

- Aalen, F. H. A. (1992) English Origins. In Ward S. V. (ed.) *Garden Cities: Past, Present, and Future*. Pp 28-51. London: Routledge Publisher.
- Andaya, B. W., & Andaya, L. Y. (2001). *A History of Malaysia* (2nd Ed.). Hawaii: University of Hawaii Press.
- Asgari, B. & Yuan, W. (2007) Depicting the Technology and Economic Development of Modern Malaysia. *Asian Journal of Technology Innovation*, 15 (1), 167-193.
- Aslam, M. (2007) Information and Communication Technology and Economic Development in Malaysia. In Kurihara, Y., Takaya, S., Harui, H., & Kamae, H. (Eds) *Information technology and economic Development* (pp 46-58). London: Idea Group Inc. (IGI) Publisher.
- Architecture Malaysia (2005). *Project Clarification: the Original Competition Masterplan for Putrajaya*. Kuala Lumpur: Pertubuhan Malaysia (PAM)/ Malaysia Institute of Architects.
- Architecture Malaysia (2006). *Putrajaya Boulevard & Waterfront*. Kuala Lumpur: Pertubuhan Malaysia (PAM)/ Malaysia Institute of Architects.
- Bunnell, T. (2002) Multimedia Utopia? A Geographical Critique of High-Tech Development in Malaysia's Multimedia Super Corridor, *Antipode*, 34 (2), 265-295.
- Bunnell, T., Barter, P. A. & Morshidi, S. (2002) City Profile, Kuala Lumpur metropolitan area: A globalizing city-region, *Cities*, 19 (5), 357-370.
- Campbell, S. (2000) *The Changing Role and Identity of Capital Cities in the Global Era*. Paper presented at the Association of American Geographers Annual Meeting, Pittsburgh, PA April 4-8, 2000. Retrieved on December 2009 from <http://www-personal.umich.edu/~sdcamp/AAG2000.html>
- Castells, M. (1990) *The Informational City*. London: Basil Blackwell.
- Colombijin, P. (2005) Kuala Lumpur and Singapore, High Hope versus a Low Profile. In Nas, P. (ed.) *Directors of Urban Changes in Asia*. London: Routledge. Pp. 96-112.
- Dasimah, O. (2001) *New Town Development and the Quality of Life in Malaysia*, paper presented at the Sixth Southeast Asia Geographers SEAGA 6 Conference, Bangi, 12-15 November.
- Emerson, R. (1964). *Malaysia*. Kuala Lumpur: University of Malaya Press.
- Fishman, R. (2005) urban Utopias: Ebenezer Howard, Frank Lloyd Wright, and Le Corbusier. In Campbell, S. and Fainstein, S. (ed.) *Readings in Planning Theory*. Malden, MA: Blackwell Publishing.
- Gatsiounis, I. (2006) Malaysia's Distant 2020 Vision. *Asia Times Online*. Retrieved Oct. 2008 from http://www.atimes.com/atimes/Southeast_Asia/HH16Ae01.html

- Geographia, (2009) *Malaysia*. Retrieved August 2009 from:
<http://www.geographia.com/malaysia/malaysiahistory.htm>.
- Gottmann, J. and Harper, R. A. (1990) *Since Megalopolis: The Urban Writings of Jean Gottmann*. Baltimore and London: The Johns Hopkins University Press.
- Gullick, J. M. (1963) *Malaya*. New York: Frederick A. Frager Publisher.
- Hall, P. (2002) *Cities of Tomorrow* (3rd ed.) Malden, MA: Blackwell Publishing.
- Harris, R. (2002) Malaysia's Multimedia Super Corridor: An Experiment in Employing Information and Communication Technologies for National Development. In Palvia, P. & Roche, E. (eds.) *Global Information Technology and Electronic Commerce*. Marietta, Georgia: Ivy League Publishing. Pp 28-54.
- Hershovitz, L. (1993) "Tiananmen Square and the Politics of Place," *Political Geography* 12, pp. 395-420. Quoted in Ho (2005-2006).
- Ho, C. S. (2006) *Putrajaya-Administrative Center of Malaysia-Planning Concept and Implementation*. Paper present at Expert Group Conference at Sung Kyun Kwan University Seoul on November 16th 2006. Retrived Feb. 2010 from:
http://eprints.utm.my/6622/1/HoChinSiong2006_Putrajaya-AdministrativeCentreOfMalaysia.pdf.
- Ho, K. C. (2005-2006) Globalization and Southeast Asian Capital Cities. *Pacific Affair* 74 (4) pp. 535-541
- Holland, L. (2001) Birth of a City. *Far Eastern Economic Review*, 164 (18), pp. 61-62.
- Howard, E. (1902) *Garden Cities of To-morrow*. London: Swan Sonnenschein & Co., Ltd.
- Jebasingam, I. J. (2006) *Creating the Essence of Cities: the Planning and Development of Malaysia's new Federal Administrative Capital, Putrajaya*. Putrajaya: City Planning Department, Putrajaya Corporation.
- Korff, R (1996). "Global and Local Spheres: the Diversity of Southeast Asian Urbanism" *Sojourn* 11. Pp. 288-313. Quoted in Ho (2005-2006). P. 538.
- King, R. (2007) Re-writing the City: Putrajaya as Representation. *Journal of Urban design*, 12 (1). Pp. 117-138.
- King, R. (2008) *Kuala Lumpur and Putrajaya: Negotiating Urban Space in Malaysia*. Honolulu: University of Hawai'i Press.
- Lay, M. C. and Yap, S. F. (2004) Technology Development in Malaysia and the Newly Industrializing Economies: A comparative Analysis. *The Asian-Pacific Development Journal*, 11 (2), 1-14.
- Lepawsky, J. (2005) Stories of Space and Subjectivity in Planning the Multimedia Super Corridor. *Geoforum*, 36. Pp. 705-719.
- Malaysia (2009) Official website of the Malaysia's government. Retrieved December 2009 from <http://www.malaysia.gov.my/EN/Main/MsianGov/>

- Mahathir Mohamad (1991) "*Malaysia, the Way Forward*" paper presented at inaugural meeting of the Malaysia Business Council, Kuala Lumpur, Feb. 28 1991.
Retrieved Jun. 2007 from:
http://www.digitalibrary.my/dmdocuments/malaysiakini/007_malaysia_the%20way%20forward.pdf
- Mahathir Mohamad (1996) *Putrajaya Speech*. Cited in Jebasingam (2006).
- Mauzy, D. K., Milne, R.S. (2002). *Singapore Politics under the People's Action Party*. London: Routledge Publisher.
- Mee, W. (2002). Malaysia's Multimedia Technopole: a Nationalist Response to Globalism and Post-Industrialism. In Bunnell, T., Barbara, L., Drummond, W., & Ho, K. C. (Eds) *Critical Reflections on Cities in Southeast Asia*. Boston, MA: Brill Academic Publisher. Pp 54-74.
- Miller, H. (1965). *A Short History of Malaysia*. New York: Frederick A. Praeger Inc., Publishers.
- Nakagawa, R. (2007) IT Promotion Policies for Economic Development: The Case of Malaysia. In Kurihara, Y., Takaya, S., Harui, H., & Kamae, H. (Eds) *Information Technology and Economic Development*. Pp 31-45. London: Idea Group Reference (IGI Global)
- Purcel, V. (1965). *Malaysia*. London: Thanes & Hudson.
- Perbadanan Putrajaya (1997) *Putrajaya- Review of the Master Plan*. Cited in Ho (2006).
- Perbadanan Putrajaya (1999) *Putrajaya Wetland*. Perbadanan Putrajaya July 1999.
- Perbadanan Putrajaya (2008). Hard copy of Putrajaya Master Plan, Acquired from Perbadanan Putrajaya on August, 2008.
- Ramasamy, B., Chakrabarty, Cheah, M. (2003). Malaysia's Leap into the Future: an Evaluation of the Multimedia Super Corridor. *Technovation*, 24(11), 871-883.
- Reid, A. (2001) Understanding Melayu (Malay) as a Source of Diverse Modern Identities. *Journal of Southern Asian Studies*, 32(3) pp. 295-313.
- Salleh, G. & Choguill, C. (1992) New Towns in Rural Regions: a Case Study from Malaysia. *Cities*, 9 (2), 138-149
- Shatkin, G. (2005) Colonial Capital, Modernist Capital, Global Capital: The Changing Political Symbolism of Urban Space in Metro Manila, the Philippines, *Pacific Affairs*, Winter 2005-2006, 78 (4), pp. 577-600.
- Sutcliffe, A. (1993) Capital Cities: Does Form Follow Function? In Taylor, J. G. Lengellé, J. G. and Andrew, C. (eds) *Capital Cities / Les Capitales: Perspectives Internationales / International Perspectives*. Ottawa: Carleton University Press.
- Rajuddin M. R. ((2005) *Malaysian Architecture: Crisis within*. Kuala Lumpur: Utasan Publication & Distributors.
- Tregonning, K. G. (1957). *World History for Malaysians*. London: University of London Press.

- Tregonning, K. G. (1964) *A History of Modern Malaya*. New York: David McKay Company, Inc., Publishers.
- Vicziany, M. & Puteh, M. (2004) *Vision 2020, the Multimedia Super Corridor and Malaysian Universities*, paper presented at the 15th Biennial Conference of the Asian Studies Association of Australia in Canberra, Jun. 29-Jul. 2.
- Yin, R. K. (2003) (3rd ed.) *Case Study Research: Design and Methods*. London: Sage Publication Inc.
- Wahab, I. B. (1990) Urban Transport in Kuala Lumpur, *Cities*, 7 (3), 236-243.
- Wee, V. (2003) Vision 2020 and Enhance Competitiveness. Retrieved September 2 2008 from:
<http://www.epu.gov.my/html/themes/epu/images/common/pdf/papers/Vision%20Competitiveness.pdf>.
- Winstedt, R. (1953). *Malaya and its History*. London: Hutchinson's University library Press.
- Additional internet sources:**
- BBC (2003) Profile: Mahathir Mohamad. Retrieve Dec. 2008 from
<http://news.bbc.co.uk/2/hi/asia-pacific/2059518.stm>
- Country Watch. (2009) *Malaysia*. Retrieved October 20th 2009 from http://0-www.countrywatch.com.iii.ocls.info/cw_default.aspx.
- CIA fact book. (2009). *Malaysia*. Retrieved October 20th 2009 from
<https://www.cia.gov/library/publications/the-world-factbook/geos/my.html#top>
- The Bujang Valley Archaeological Museum (2007). *Sri Vijaya map*. Retrieved October 26th 2007 <http://www.southeastasianarchaeology.com/2007/10/26/bujang-valley-archaeological-museum/>
- World Gazeter (2010) *Malaysia Metropolitan Areas*. Retrieved Jan. 2010 from
<http://www.world-gazetteer.com/wg.php?x=1160302510&men=gcis&lng=en&des=gamelan&dat=32&srt=pnan&col=ohdq&pt=a&va=&geo=-152>
- World Bank (2010) Malaysian Economic Mornitor, Reposition for Growth. Retrieved from www.worldbank.org/my on January 2010.

BIOGRAPHICAL SKETCH

'Vincent' Levu Tran was born in Vietnam in 1971. He is the eldest boy in the family of two boys and a girl. Immediately after graduating high school in 1989, he entered the University of Architecture in Saigon, the capital city of former South Vietnam. In 1994, he was given a chance to migrate to the United States of America, one month short of his graduation. He gained admission to the University of Florida in 2004, College of Design, Construction and Planning, School of Architecture, and subsequently awarded both the bachelor degree and master degree in architecture here in 2007 and 2008 respectively. During the same period, he also worked on his concurrency degree, the Master of Art in Urban and Regional Planning.

Vincent is happily married to Van Anh, his wife of 19 years. Together they have two son, Dzuy (Kevin) and Khoi (Ryan).