# **CHAPTER 1: INTRODUCTION**

Today, urban parks are emerging as one of the most important spaces in the urban fabric. They are multi-purpose public spaces in the city that offer social, economic, and environmental benefits (Urban Park Online, 2001). They help to enhance the image of a city, and improve the quality of urban life. Most cities have urban parks, and these have become important and valuable urban spaces. People come to them for recreation, social gathering, and passive enjoyment. Additionally, urban parks provide habitats for urban wildlife.

Urban parks are probably among the oldest features in cities. According to Springgate (2001), parks are peaceful, tranquil, beautiful spaces to which people are intrinsically attracted. Historically, urban parks emerged from public spaces that were used as grazing land in cities or towns. Evidence from Western Europe in the 17<sup>th</sup> century and New England towns in the United States shows that inhabitants set aside lands near their towns, cities, or villages for the common use of their citizens. The citizens used these areas, or "commons" to graze livestock, and hold the animals before selling them or using them in the village or town (Newton, 1971 & Jellicoe, 1975). Over time, these grazing lands became important spaces in the city as people started to use them for other purposes.

In the western world, the modern concept of the urban park started in the early 19<sup>th</sup> century, during the Industrial Revolution. At this early stage, planners recognized that urban parks were important features that could improve the quality of urban life, which declined during the rapid industrialization of this time. Parks became places to escape from the stresses of chaotic industrial cities. The idea swept the United States, England, and mainland Europe. Cities in Sweden, Denmark, and Holland started to develop urban parks to improve the quality of their cities (Jellicoe, 1975). During this time, parks were often built to serve multiple motives, which usually included:

"A philosophy of social reform to improve the physical and moral welfare of the working class, a utilitarian belief in the value of open spaces and recreation for labor productivity and the dampening of social unrest, a romantic desire to bring back nature into the cities, a sense of civic pride and a psychology of social hygiene" (Yuen, 1995, p. 955).

In addition to rapid industrialization, mass urban migration was another factor that stimulated the growth of urban parks. Crowded urban spaces, due to an influx of people massively degraded the quality of urban life. Planners began to see urban parks as places that could increase the tranquility and comfort of urban life by providing a space for citizens to escape from the squalor and stress that characterized much of their daily routine. Thus, parks served as places of recreation and leisure. In the late 19<sup>th</sup> century, urban parks started to be developed at public expense (Yuen, 1995), when the social reform of the working population in Britain paved the way for early legislation providing open spaces in cities and towns. Since the 19<sup>th</sup> century, urban parks have transformed American and European cities. They have not only enhanced and beautified the urban environment, but also have become "important structural components in the shaping of urban form" (Yuen, 1995, p. 955).

During the colonization period in the late 19<sup>th</sup> century, Europeans introduced the concept of the urban park to Asia. By the early 20<sup>th</sup> century, cities like Manila, Hong Kong, Shanghai, Singapore, and Kuala Lumpur already had their own urban parks. However, during colonization, landscapes were managed and shaped according to the needs of the colonial governments. They managed land to maximize their benefits. In the case of open spaces in the city, colonial officers built urban parks to cater to the recreation and leisure needs of their families, their citizens, and local affluent people, such as royal family members. In other words, colonial governments did not seek to develop public parks, but rather private sanctuaries (Yuen, 1995). After World War II, when countries such as Singapore, Malaysia, Indonesia, China, and the Philippines gained their independence, the need for urban parks became greater as their cities expanded and urban population rapidly grew (Yuen, 1995). People needed better urban spaces for health and recreation, and there was an outcry for better town and city planning. Governments in most of the countries in the East started to develop new parks or redevelop old ones to accommodate these needs.

Today, urban parks are very important assets to city-states such as Singapore, Hong Kong, and Taiwan, because these countries are highly urbanized and industrialized. In addition, since the 1990's, the need and demand for urban parks has grown in Malaysia, Thailand, Indonesia, and Philippines, as these countries have become more urbanized and industrialized, and have undergone massive demographic changes.

The urban park is an asset to cities and city dwellers. It provides spaces for leisure and passive and active recreation. History shows that the uses of urban parks have changed to match the needs of their societies and cities. For example, a change in lifestyle might increase concern for health and fitness, meaning more people might come to parks for exercise. Therefore, demands for different recreation areas and activities will affect park planning and design. Urbanization, on the other hand, means more people will be in the city, creating substantial demand for open spaces, family activities, and programs for the elderly and children. Urban parks are expected to fulfill all these disparate needs. Failure to meet current social needs may lead to disuse and neglect of urban parks. Therefore, it is important to ask how urban parks can be designed to meet the needs of their users.

Research on social behavior can offer clues on how to better plan and design urban parks. Since the establishment of urban parks in the West, one of the primary concerns among social scientists, landscape architects, and park advocates is the question of how to gauge the impact of social behavior, and use this information to help build better parks. Understanding who is doing what, when, where, and why is vital for designing better, and more popular, urban parks. However, there has been very little research on park use in Southeast Asian cities, and research results from Western cities may not be transferable because of differences in climate, culture, language, history, and lifestyle.

This thesis aims to understand the current demands on urban parks in Malaysia. It specifically looks at an urban park in the city of Seremban, Negeri Sembilan. The British Colonial Government built this urban park in the early 1900's. Today, Seremban Urban Park is apparently not meeting the needs of the public at large, even though it is near other active

public spaces, such as the state mosque, the downtown area, public offices, and the public library.

#### STATEMENT OF PROBLEMS

Unlike urban parks in the West, urban parks in Malaysia have received very little attention from researchers. Furthermore, unlike most Western countries, Malaysia lacks a park tradition and history. Although folk-arts and folk-stories portray gardens and other forms of parks, these spaces existed only for members of the royal family and other autocrats. None of the spaces were developed for or used by the public. The first urban parks in Malaysia were instituted when the British colonized Malaysia (then Malaya)<sup>1</sup> in 1874. The British Colonial Government built urban parks in the cities that they administered so that their colonial officers could have spaces in which to enjoy recreation. Today, these urban parks can be found in Taiping in the state of Perak, in the Federeal Territory of Kuala Lumpur, and in the city of Seremban in the State of Negeri Sembilan.

Seremban Urban Park was designed for British officers, royal Malay families, and Malay autocrats. The design of the park mirrored the Romantic landscapes that were popular in England in the late 1800's, and paralleled the American "Pleasure Ground" urban park movement that was popular from 1850 to 1900 (Cranz, 1982). Seremban Urban Park consisted of a pond, meadow, rolling landscape, and extensive natural areas for passive enjoyment, escape, solitude, and active recreation. After Malaysia gained its independence in 1957, the Seremban Municipal Council took control of the park and opened it for public use. People from all backgrounds, ethnicities, incomes, educations, and genders were now welcome to use the park. People came to the park for recreation and the weekend concerts that the municipal council held there. The council added other activities and attractions in the park, mostly in the1970's, such as a mini bird park and amphitheatre. There is no clear evidence to show why the Seremban Municipal Council chose to provide these facilities in Seremban Urban Park. However, it is possible that the local government wished to assist

<sup>&</sup>lt;sup>1</sup> Malaysia was known as Malaya until 1963 when Sabah, Sarawak and Singapore joint Malaya to form Malaysia. Singapore left Malaysia in 1965 to become independence state

people in making a smooth transition from an agrarian to an urban society (Mohammad Hassan, 1994).

The park also meets the requirements of the Town Planning Act of 1974 (Town and Regional Planning Department, 1999). This act lays out parameters for providing open space in the city. It was adopted from the British Colonial Land Code, which was used to regulate town and regional planning in Malaysia during colonial rule. However, in 1974, the code was amended to become the Town Planning Act, and it now regulates urban planning in Malaysia.

Although Seremban Urban Park is located in the heart of the city of Seremban, there have been very few changes in the land uses surrounding the park since its formation. It is surrounded by low-density housing areas, government offices, civic buildings, hotels, and commercial areas. However, by the end of the 1990's, Seremban Urban Park was suffering from a lack of use, lack of care, and most notably, physical deterioration. Historically, these are typical problems for urban parks all over the world (Hayward, 1988). These problems have led to a negative public perception of the park. As a result, fewer people now use it. To ensure that the public image of the park does not further decline, and to attract more people to it, planners need public input so they can understand what factors influence potential park patrons, who uses the park, what their needs are, and their perceptions and preferences regarding the park.

### NEEDS AND SIGNIFICANCE OF THIS STUDY

Malaysian urban park planners need far more research into why people need parks, how people use them, and what these parks mean to their users. Planners particularly need this research now, as urbanization in Malaysia is moving very rapidly. The 2001 Census shows that the urbanization rate increased from 50.7% in 1991, to 62.0% in 2000 (Malaysian Department of Statistics, 2001). With this massive influx of people, it is vital that Malaysia develop an effective urban park structure.

Due to economic prosperity and urbanization, the lifestyle of the average Malaysian is also changing. For example, the <u>Agriculture Exporter</u> (1997) reports that, in Malaysia, people have embraced American fast food franchises because of their changing lifestyles due to rapid urbanization. However, these changes in diet have led to an increase in heart- related diseases among Malaysians (<u>Business World</u>, 1997). This fact demonstrates that the Malaysian lifestyle is changing. People spend more time working rather than relaxing. Thus, they may have priorities that supercede their visits to urban parks. These changes will have a considerable effect upon the planning and design of urban parks in Malaysia. Therefore, landscape architects and planners need more research to further understand people's behaviors, and thus plan and design urban parks in Malaysia that accommodate those behaviors.

In the year 2000, a desire to upgrade Seremban Urban Park prompted the Seremban Municipal Council to appoint a team of landscape architects to develop a proposal on how to upgrade the park. However, the team lacks an expert equipped to conduct a study on people's attitudes towards the park. Although grants from the National Landscape Department have given the Seremban City Council funds and outside technical expertise that will help them redevelop the park, the National Landscape Department has little experience in how to assess people's needs, even though it has built urban parks around the country.

In addition, in a country where public participation (hearings and meetings) has not been widely practiced, there are problems with integrating public opinion into the development process. Consequently, this thesis study can help planners understand how research can be used as a tool and strategy to understand public opinion about future park development. The study is important and timely because it provides baseline information about user needs that can be used not only for Seremban Urban Park but also for future parks that may be developed elsewhere by the National Landscape Department.

### **RESEARCH OBJECTIVES**

The research objectives of this study are

- 1. To provide baseline information regarding factors that influence whether people go to Seremban Urban Park
- 2. To explore the nature and scope of people's needs and preferred activities, related to the use of Seremban Urban Park

# THESIS ORGANIZATION

The thesis is organized into six chapters. This first chapter describes the historical background and importance of urban parks, states problems that these parks face, and outlines the needs and significance of the study and the study's objectives. The second chapter provides a review of the literature that has helped to define the research. The third chapter provides background on Malaysia, the city of Seremban, and Seremban Urban Park. Chapter four discusses the methodology of the study, including the method that it used, why it was used, how the data was collected, and how it was analyzed. Chapter five describes the findings of the research and the results of the analysis. Chapter six, the conclusion, discusses the implications of the findings and offers recommendations for future researchers.

# **CHAPTER 2: LITERATURE REVIEW**

#### PURPOSE

The purpose of the literature review is to gain an understanding of broader issues pertaining to the research. In addition, it is also important to examine previous research related to the topic of this research. Lastly, the literature review provides the theoretical framework needed to further define the research scope and questions. The literature review is mainly derived from research about urban parks that has been done outside Malaysia, because there has been little research on urban parks in Malaysia or Southeast Asia.

The literature review helps to define and narrow the research questions and problems. Since the objectives of the research are to provide a description of the factors that influence whether people visit Seremban Urban Park and to explore the needs and preferred activities of the Park's patrons, the literature review is divided into the following three sections:

- 1. A definition of "urban park"
- 2. Meeting human needs in urban public spaces
- 3. Factors that influence whether or not people use urban parks

### THE DEFINITION OF AN URBAN PARK

Historically, urban parks have evolved from pieces of land set aside informally for grazing, into multi-purpose urban spaces for recreation, escape and social gathering. This evolution of the uses and purposes of urban parks makes an established definition of the term impossible. Another reason why the definition varies is because it overlaps with general park terminology. According to Cranz (1982), in the United States in particular, the definition of "urban park" became problematic after it became a government institution service. She argues that, today, the word "park" is applied

"To an almost indiscriminate range of properties, from children playgrounds, neighborhood playfields, golf, bathing, and camping areas, athletic fields to zoological and botanical gardens, arboretums, landscape ovals, triangles and other small segments of the street grid, neighborhood parks, downtown squares, scenic outlets [areas], waterfront and land reservation. The common purpose uniting this collection is not obvious" (p. ix).

The most famous definition of urban park was provided by Frederick Law Olmstead who defined the urban park as "a naturalized passive retreat" (Rutledge & Molnar, 1986, p.4). A park is "a pleasure garden where masses unable to flee overcrowding, disease and foul air, could find near their home a bucolic agrarian environment" (Eplan, 1988, p. 132). Olmsted's definition has been widely used all over the world, particularly in the United States from the mid 1800's to the early 1900's. Professions other than Landscape Architecture, particularly those interested in the concept of space and place, also have defined the urban park. For example, Solecki and Welch (1994), both urban geographers, expanded the definition to "landscape features that serve many functions as providers of passive and active recreation, environmental benefits and wildlife habitats" (p. 93).

However, Yuen's (1995) definition of an urban park as "any public area of land set aside for aesthetic, educational, recreational or cultural use by the public amidst essentially urban surroundings" (p. 955) is the most suitable for use in this research, because he used this definition in his study of urban parks in Singapore (1995). Historically, Singapore was part of Malaysia, and both are former British Colonies. They both derive their concept of land management from the British Colonial Land Code, which governed town and regional planning in both countries during the colonial era. After independence, both countries amended the land code to meet current needs and values, but the amended acts (Town Planning Act, 1974, and Singapore Master Plan, 1970) were still based on the British Land Code.

Yuen provides a comprehensive definition of "urban park," encompassing lands that are located in urban areas and are set aside for public uses, including recreation, aesthetic appreciation, and cultural and educational fulfillment. His definition correlates with open space planning regulations in Malaysia, which require that open spaces must be designated as a specific land use. It is relevant for this research, as Seremban Urban Park has been designated by the government as a public space for a specific use (open space) in the middle of an urban area. Further reflecting Yuen's definition, the park also provides opportunities for recreational, aesthetic, cultural, and educational activities. Given the historical and practical relevance of Yuen's definition, it is clearly the most suitable for this research.

#### **MEETING HUMAN NEEDS IN URBAN PUBLIC SPACES**

Hayward (1989) suggests that the needs of people have not been addressed in open space design for the past two decades. According to Yuen's (1995) study of the development of urban open spaces in Singapore, problems exist because:

They [the urban open spaces] were to serve the most direct and explicit needs of the population (as a place to sit, stroll and play) without regard for more eclectic interests. Thus, though individual needs may be different; all groups were given the same bland park design. Park construction generally proceeded without regards for the needs of local users or differences in topography" (p.959).

Given the problems above, it is essential to understand human needs in order to plan and design urban parks.

Maslow (1954) breaks down human needs into six categories: physiological (e.g., food and shelter), safety-security (protection from danger), affection belonging (need to belong to a group or community), esteem (need to be recognized), self-actualization (fulfillment of potential), and cognitive-aesthetic (need to learn and to appreciate beauty). Maslow suggests that if the lower needs cannot be met, the highest needs cannot be reached at all. Physiological needs are the lowest, but the most important, because they are the strongest and serve the very basic needs of humans.

Many designers, including landscape architects, use Maslow's category of human needs to inform their designs. Rutledge (1985) uses Maslow's taxonomy of human needs as a theoretical basis for understanding human needs in designing parks. Maslow's taxonomy is popular because it is straightforward, providing a major list (not sub-categorized), and with categories that do not overlap (Rutledge, 1985). However, because this list is general, careful consideration needs to be made when applying it to park design. As Rutledge (1985) notes, "A detailed level of selection is necessary to determine which of the design-relevant

needs are actually present among people to be served"(p. 62). He suggests that the needs of people must be situation-specific or site-specific. What he means by situation-specific is that designers should not over generalize an individual's needs. In other words, they are not similar for every place. He argues that generalization of needs and their rankings will result in a clash between designers and users. He notes that even the various user groups for specific places "can be far apart" (p. 66). Rutledge goes on to argue that the "primary users of a particular place may not have some of the needs in mind at all if the needs of people are generalized from place to place" (p. 62). It is important for this research to understand that people's needs vary from place to place, and that it is important for designers to understand people's needs if they hope to successfully renovate Seremban Urban Park.

From the perspective of leisure research, Driver and others (1977) claims that people's needs are derived from motivations to seek benefits for engaging in leisure activities. He bases his claims on expectancy-valence theory. Driver refers to Lawler's (1973) discussion of Expectancy and Valence Theory, which states that:

"Behavior in the work place is a function of both ability and motivation. Motivation was viewed as a hierarchy of instrumental and terminal experience. Instrumental expectancies describe the relationship between effort and performance outcome. Instrumental expectations are important because they lead to terminal expectancies that are valued, long-term personal goals" (Manfredo and Driver, 1996, p. 190).

Based on this assumption of motivation theory in the workplace, Driver and Manfredo (1996) suggest that "recreation activities are a behavioral pursuit that are instrumental to attaining certain psychological and physical goals" (p. 189). Driver further argues that if we know how to attain these psychological and physical goals, we can provide a better planning and management tool for recreation areas. To further understand how to attain psychological and physical goals, brivers and others (1977) developed preference scales to identify people's motivations or desired psychological outcomes in engaging in wilderness (including urban wilderness). The scale is known as the Recreation Experience Preference (REP), and it tests a range of 41 motivations, from seeking solitude and engaging in passive activities, to social activities and active recreation. The wide range of items in the scales reflects the acknowledgement of Driver and others (1977) that human needs are broad, and

that every planning process for leisure activities should be situation-specific, as Rutledge suggests (1985). This literature argues that people's preferences for leisure activities are derived from certain psychological needs and goals. The psychological needs and goals can be understood by assessing people's preferences for park activities. This study will try to understand people's preference for activities in Seremban Urban Park, and help designers maximize those preferences when they renovate the park.

Carr and others (1992) propose that urban public spaces must meet five basic needs of people: comfort, relaxation, passive engagement with the environment, active engagement with the environment, and discovery. They argue that these needs should be "examined not only because they explain the use but also because use is important to success [urban public spaces]" (p. 92). According to Carr and others, comfort is a prerequisite for other needs to be met. As such, it is a basic need, and plays a vital role in determining how long people stay in urban spaces.

Comfort can be categorized by its physical, social, or psychological components (Carr *et al.*, 1992). Physical comfort measures how people react physically with an environment. For example, seating that considers physiology and climate conditions, such as shade, might provide a high degree of physical comfort. Social and psychological comfort is related closely to how people experience urban spaces. It can be measured in terms of the extent to which people feel free and secure to do something.

Carr and others state that "Relaxation is a more developed state with body and mind at ease" (Carr *et al.*, 1992, p. 98). In order for relaxation to occur, people must be comfortable. Relaxation is a combination of physical and psychological needs. A lot of research about urban spaces cites relaxation as a key factor influencing patron use of spaces. Relaxation occurs when people engage not only in passive areas, but also in active and noisy ones (Carr *et al.*, 1992). For example, while trees, greenery, and contained water, such as a lake, are associated with passive relaxation, people also consider certain sounds, such as waterfalls and the wind, elements that offer relaxation. Carr and others (1992) note that there are two factors that could enhance relaxation. The first is "the elements of respite or contrast to the

adjacent urban context" (pp. 102). They argue that places that contrast with the surrounding urban conditions can offer a high degree of relaxation. The second factor is the presence of natural elements, such as water and trees. They note that a study of Greenacre and Bryant Parks in New York shows that natural features, such as water and green, offer opportunities for retreat and relaxation.

The need for passive engagement is also important. As Carr and others (1992) note, "Passive engagement with the environment could lead to a sense of relaxation but it differs in that it involves the need for an encounter with the setting, albeit without becoming actively involved" (p. 105). Observation is a passive engagement activity. Observation includes watching people's activities, watching program activities such as sports, and observing natural environments.

On the other hand, active engagement involves contact with people. It includes socializing, in terms of talking with others and engaging in recreational activities (Carr *et al.*, 1992). It is noted that, while senior citizens might be comfortable talking to each other, adults might engage in recreational activities, and children play in a playground. The form of active engagement also differs across culture (Carr *et al.*, 1992 Lyle, 1970). For example, Carr and others refers to a Lyle study of use of the parks in Los Angeles and Paris. He found that there are significant differences between Americans and French in their use of urban spaces such as parks and urban plazas.

Discovery is the last need in Carr and others' (1992) list of needs in urban public spaces. It is closely associated with exploration. In their Information Processing Theory, Kaplan and Kaplan (1977) explain that people are information hungry creatures. Therefore, the need for exploration is essential for their survival. In urban open spaces, discovery can be translated to the way that people move through spaces. Good spaces should offer exploration opportunities. Exploration can be enhanced by the physical design of the spaces and their visual vistas. The need for discovery, according to Carr et al., (1992) is important because it relates to human mental and physical development: "Forcing people to remain in a confined, bare setting is a form of torture or punishment" (p. 134).

Carr and others' (1992) list of human needs in an urban area is important, as it provides reasons for human engagements in urban open spaces. The list provides a broad understanding of human needs in urban public spaces. Meeting these needs is not only important for user satisfaction, but also a key factor in determining the success of urban open spaces. For Seremban Urban Park, one may assume that the park is not meeting the needs of its patrons; this research will try to understand if those needs are not being provided in the park, or if they simply fail to satisfy their users. It will describe the needs and preferred activities of park patrons.

In summary, it is very important to meet people's needs in urban spaces. Rutledge states clearly that it is important to not generalize these needs; the understanding of needs must be site specific. His study is relevant to Seremban Urban Park because it shows that designers need to know local needs and preferences. The conclusions of Western studies are not necessarily applicable in Seremban, Malaysia. People in Seremban might have different goals and needs. According to Drivers (1977), people's needs are subject to their desire to meet certain goals and objectives and get benefits from them. Therefore, it is important to understand people's preferences for activities in the park because the activities can reveal certain goals and objectives of their users. Carr and others (1992) offer a list of needs that are important for urban open spaces. The needs are specific for urban areas, and are thus relevant to Seremban Urban Park. The needs are comfort, relaxation, passive engagement, active engagement, and exploration. Looking at what the literature has suggested, needs fulfillment is very important to the success of spaces and the satisfaction of their users. This might be one of the reasons why people are not coming to Seremban Urban Park. Therefore, it is important for this research to examine if user's needs are not being met in the park. It is relevant for the research to understand if the park fails to recognize local people's needs, which results in people not coming to the park. Does the park fail to understand the goals and objectives of its users? Does the park simply fail to meet the needs of people at large? A failure to meet people's needs is likely to result in spaces that are unsuccessful and uninteresting.

#### FACTORS INFLUENCING WHETHER PEOPLE USE URBAN PARKS

The literature suggests that urban parks can potentially fulfill a broad range of human needs. However, whether or not people choose to use urban parks to meet those needs may be influenced by a number of physical, social and cultural factors. Four factors have been identified as potential influences on whether people use Seremban Urban Park. These factors are social class, accessibility, sense of welcome/surrounding context, and sense of territoriality. The selection of these factors is based on their relevance to the social, physical, and psychological context of Seremban Urban Park, which will be explained in Chapter 3.

### Social Class as a Factor

According to Rapoport (1977 and 1984), the use of spaces varies among different user groups. These variables can include gender, race, income, and life cycle. Edwards (1981) studied recreation behavior and found differences in patterns of recreation attributable to social class. Walker and Kielcott (1995) support his finding by claiming that "Members of a class tend to have similar lifestyles, educational background, kinship network, consumption pattern, work habits and beliefs" (p.298). This is a reason why people seek out people with similar interests and similar lifestyles in a similar type of place. Gottdiener (1994) supports the relationship between spatial quality and class by noting that "spatial relation is social relation that is defined by culture and class" (p. xii). Walker and Kielcott (1995) refer to Enhereich (1979), and suggest that social classes should be defined by six social characteristics: income, education level, occupation, gender, culture, and age.

Wright's Typology of Class<sup>2</sup> divides people into groups based on their control over economic capital and physical means of production, and authority over other classes. Wright's typology of class is an expansion of Karl Marx and Weber (1922) Theory of Class, and is based on capitalist economic theory. Within Wright's Typology of social class (1978), the semiautonomous class has some control over economic capital and the physical means of production, but no authority. Meanwhile, the working class has little or no control over what

<sup>&</sup>lt;sup>2</sup> Please see Walker and Kielcott (1995) and Wright (1978) for further explanation of social class

they do, or over capital. A study by Walker and Kielcolt, (1995) on the use of wilderness areas, including urban wilderness, shows that the semiautonomous class and the working class were prime users of the park.

Very few members of the upper class or bourgeoisie use parks, because they have opportunities to socialize in better places. The semiautonomous class uses parks because they want to enjoy the beauty and serenity of these settings, and fulfill their need for a passive environment. On the other hand, the working class comes to urban parks because they do not have opportunities to experience similar environments in other places, such country cottages and country clubs. Research by Walker and Kiecolt (1995) regarding the use of wilderness and parks in United States reveals that social class might play a role in the use of parks.

According to Walker and Kielcolt, (1995) and Taylor (1999), the Spill Over Hypothesis and Compensation Hypothesis could explain why semiautonomous and working classes are the prime users of parks. Those hypotheses are derived from sociology theory and leisure science research that explains the behavior of different classes and its implication on the use of parks.

The spill over or learning generalization hypothesis posits similarities between work and leisure due to "a direct process of learning generalization by which the lessons learned in one sphere of life are carried over to other spheres of life" (Walker and Kielcolt, 1995, referring to Miller and Kohn, 1983, p. 304). Miller and Kohn (1983) suggest that, if the spill over hypothesis is correct, the "leisure activities among semiautonomous class should be highly complex, involving abstract thinking, problem solving and creative activity" (p. 304), because these types of activities "resemble the jobs conditions of semiautonomous class" (Walker and Kielcolt, 1985, p. 304). Further, places where they may enjoy complexity, abstract thinking, and creative activity are natural areas, because natural areas are often characterized based on their complexity and mystery (Kaplan and Kaplan, 1977). Even though the study is about wilderness, it acknowledges the urban park as an urban wilderness area. Therefore, the findings are relevant to understanding the relationship between social

class and the use of urban parks. It is concluded that urban parks can offer the same conditions and settings as natural areas, but do so in an urban area. Therefore, urban parks are also popular among the semiautonomous class because they provide settings and conditions that resemble their job conditions and workplace.

Meanwhile, the Compensation Hypothesis explains why the working class is also one of the prime users of urban parks. The hypothesis claims that work is a dominant force in a person's life, and leisure compensates for the rigors, monotony, and brutality of the job. As Taylor (1999) states, "excessive drinking, exuberant park play, demonstration of power, and loud, rowdy behavior are the opposite of the routinized danger and boredom of the job" (p. 423). According to the hypothesis, the working class comes to urban parks because they want freedom that they cannot find in the workplace. Therefore, they feel that their free time should be compensated with activities that can fulfill their needs and desires, which are neglected in their workplace (Taylor, 1999; Walker and Kielcolt, 1985). Walker and Kielcolt (1995) and Knopft (1988) also note that "the semiautonomous class has considerable but not complete freedom and autonomy from supervision in their jobs" (p. 304). Therefore, they might use urban parks in the same ways as the working class.

The literature states that social class plays a vital role in deciding whether a person will go to an urban park, particularly because of the opportunities that they provide for physical and psychological relief. This is particularly relevant in Malaysia, and Seremban in particular, as its rapid urbanization and change in lifestyles may strongly affect people's decisions to use urban parks. This research will try to understand if social classes play a role in determining patron's use of Seremban Urban Park. The understanding of which type of class is a prime user of an urban park is important because parks probably should be designed according to their needs and preferences. On the other hand, this raises the question of whether parks should be designed to meet the needs of one social class or all of them. It also leads one to wonder if other variables, such as gender and ethnicity should also be examined.

#### Accessibility as a Factor

In this section, urban parks have to be generalized with urban open spaces and parks in general because there are very few studies pertaining only to accessibility of urban parks. This generalization is justified by the broad definition of urban parks "a public land put aside for public used amidst essentially urban surrounding" that this research uses (Yuen, 1995, p. 955).

One of the key issues in designing urban parks is accessibility. It is an important factor in opening a public space to diverse users. Mckenzie and Mckenzie (1978) define public spaces as those that are usually open and have unrestricted access from all adjacent spaces. For a space to have unrestricted access, it must display certain physical, visual, and social characteristics (Carr *et al.*, 1995)

To describe physical access, Lynch and Carr (1965) state that public spaces should relate or link to pedestrian circulation systems. They caution that, if the linkages are not obvious, the space will be underused. Besides the link to pedestrian circulation systems, "open spaces, particularly those for daily or weekly use, should be physically proximate to their users and connected to them by visible easy paths" and "the access should be short and direct" (p. 400). Physically proximate, short and direct are themselves variable terms. In the West, studies show that people will not travel more than five minutes on foot to reach a destination (Lynch and Carr, 1965). However, in other places, people may walk more than 15 minutes. The bottom line is, places should not be too far to be reached by foot, and if destinations are far, support systems such as public transportation should be key factors for good access to public spaces.

Research in leisure study shows that parks and wilderness areas located near population centers receive the most use (Roggenbuck and Lucas, 1987). One of the reasons that users go to nearby parks and wilderness is because they lack access to parks that are further away. This reason is tied strongly to socio-economic factors (Schereyer, 1986). Shereyer's connection of accessibility with economic status shows that access is not only a physical

factor, but also a "psychological factor," because people with low incomes may feel that they do not belong to a place because they do not have the proper amenities to get to it.

This literature is relevant, as it shows how accessibility plays a role in bringing people to certain urban spaces. It is essential for this research because accessibility may be an important factor influencing use of Seremban Urban Park. People may not come because the park is inaccessible. The urbanization and expansion of Seremban has resulted in people moving away from the city center for better housing conditions and facilities. This situation means that fewer people live in the city center; therefore, the park is isolated and far from people's homes. Most people come to downtown Seremban for businesses and shopping purposes only. This research will try to understand if accessibility is a factor in influencing the decision to go to Seremban Urban Park.

#### Sense of Welcome and Context as Factors

A sense of welcome is closely related to visual access, social access and surrounding context. Visual access is important to make people feel free to enter a space (Carr *et al.*, 1995). Frank and Paxton (1989) and Newman (1972) explain that visual access is important for public spaces, especially to prevent fear of crime and undesired activities. This especially is true among women and children. Another type of psychological access is symbolic access or social access. Symbolic access means that there are signs that indicate who is welcome and who is not welcome in the parks (Carr *et al.*, 1995). The sign might be in the form of a cultural symbol or the presence of security personnel. One way to avoid limited access due to cultural symbols is to present other symbols that make it clear that a place is open to the general public, for example shops and vendors (Carr *et al.*, 1995).

Visual and social access also might play important roles in Seremban Urban Park. The park is surrounded by government and Muslim institutions, and these places display Malay and Muslim symbols. It is possible that people from other ethnic groups might feel that they are not welcome, or that they have limited access to Seremban Urban Park. For spaces to be used by diverse groups of people, they must be located within an appropriate context. Rutledge and Molnar (1986) emphasize that a good park should relate to its surrounding context. One of the most important aspects of context is surrounding land use. A good understanding of surrounding land use helps designers improve accessibility (Rutledge and Molnar, 1985). For urban spaces to be successful, surrounding land use should be comprised of mixed land uses, rather than a single one. If parks or urban spaces are surrounded by mixed land uses, they may serve multiple functions because they are open to different kinds of activities. In addition, by having mixed land use, open spaces can attract a diverse group of users (Lennard & Lennard, 1987).

The literature shows that the surrounding land use plays an important role for people coming to the park. Seremban Urban Park is mainly surrounded by low-density housing, government offices, and civic buildings. Very little of the park is related to the commercial area of downtown Seremban. Land uses surrounding Seremban Urban Park are considered mixed, but most of them are passive in nature. The land uses invite specific user groups, such as users of the mosques and government offices, who come to these places for a specific purpose. Therefore, this research will try to understand whether the surrounding land use context for Seremban Urban Park affects whether people use the park. Context is also important in providing a sense of territoriality to people, because context provides symbols that can influence the sense of territoriality and meaning (Rishbeth, 2001)

#### Sense of Territoriality as a Factor

Sommer (1977) provides a definition of territory as "an area controlled by an individual, family, or other face to face collectivity"(p. 268). Walmsley (1988) further notes that "Human territoriality is best thought of as the learned response to small-scale environments that satisfies basic needs for security and identity", and that it is culturally driven (p. 89). Sommers (1977) suggests that, "Since human communication is based largely on symbols, territorial defense relies more on symbols such as name plates, fences, and personnel's possessions than on physical combat and aggressive play"(p. 268). Walmsley (1996) refers to Brower (1980), by stating that territoriality serves the purpose of regulating social

interaction. People want to control social interaction for security, self-esteem and selfidentity; all these factors can be facilitated largely by appropriation of space.

There are many classifications for human territoriality. Walmsley (1988) classifies territoriality into four groups: intimate, personal, social, and public. On the other hand, Porteous (1977) classifies territoriality into three categories: microspace, mesospace, and macrospace. All of these classifications are based on home - where people live, and their location. According to Porteous (1977), territoriality varies with culture, age, sex, affinity, social influence, personality, and environment. A sense of territoriality provides security, identity, satisfaction, and stimulation.

A study by Sideris (1995) about the use of an urban park in a socially and ethnically diverse community in Los Angeles found that the sense of territoriality for certain ethnic groups is higher when they dominate the park. As a result, other ethnic groups come to the park less frequently. The study also found that distance to the park within certain ethnic neighborhoods influences who uses the parks. Rishbeth (2001) studied the relationship between ethnic minority groups (mainly immigrants) and public parks in Great Britain. She found that the presence of cultural symbols or elements familiar to certain cultures increases the rate of preference and sense of territoriality among those ethnic minorities. Sideris's and Rishbeth's findings support a concept of human territoriality that is culturally derived and supported strongly by symbols, as suggested by Sommers (1977) and Walmsley (1988).

With regard to Seremban Urban Park, the surrounding land uses are associated with Malay and Muslim cultural symbols. These symbols may make people who are not Malay or Muslim feel less comfortable in the park. They may feel that they do not belong, or that the park is not their territory, when they are surrounded by foreign cultural symbols. In addition, the presence of the State Mosque next to the park might psychologically push people to limit their activities. For example, they might feel obliged to dress properly, not to make noise, and so forth. It is possible that the relationship between territoriality links and culture, as suggested by Porteous (1977), Sommers (1977), and Walmsley (1988), may exist in Malaysia, particularly in Seremban.

#### CONCLUSION

The literature review has informed the research design by providing a working definition of the term "urban park" and a checklist of human needs that may be met in an urban park setting. In addition, it identifies a number of physical, social and cultural factors that may influence whether people choose to use a particular urban park. The following discussion summarizes how these findings apply to the current research.

For the purpose of this research, an urban park is defined as "any public area of land set aside for aesthetic, educational, recreational or cultural use by the public amidst essentially urban surrounding" (Yuen, 1995; Gold, 1973). This definition is used because it is relevant to the common uses of urban parks in South East Asia and it is consistent with the use characteristics of Seremban Urban Park. Seremban Urban Park is a public urban space that provides opportunities for active and passive recreation, as well as educational and cultural programming.

Drivers and others (1977) suggest that people's needs for recreation are derived from a desire to achieve certain goals and objectives. Therefore, it is important to know what activities and settings can fulfill those goals and objectives. Carr and others (1992) propose that urban public spaces must meet five basic human needs: comfort, relaxation, passive engagement, active engagement, and exploration. The list is comprehensive and relevant for any urban public spaces, as it provides a key for the success of urban public spaces. The research findings of Drivers and others (1977) and Carr and others (1992) are important in informing this research. It is important to discover if Seremban Urban Park is not meeting people's needs, resulting in fewer park visitors in the past several years.

The literature review identified four specific factors that may influence preference for Seremban Urban Park: social class, accessibility, sense of welcome/context, and sense of territoriality. While other factors might be important, this study will focus on these four. Research that has been done elsewhere reveals that these factors are important influences upon people's preferences for urban spaces. They are particularly relevant to this study because they are consistent with the research questions and context of the site in Malaysia.

Walker and Kielcolt (1995) suggest that park and wilderness areas attract specific groups of people, particularly the semiautonomous and working classes. One question that arises is if social classes also influence the use of parks and open spaces in Malaysia. It is essential to understand how the changes in lifestyle and socio-demographics have affected people's decisions to go to Seremban Urban Park. In addition, successful urban public spaces provide good accessibility to their patrons. Accessibility depends on how far people live from the park and how they travel there. For this research, it is important to examine accessibility to Seremban Urban Park to understand if people can easily access the park. Psychological access is another type of access. Psychological access provides security and a sense of welcome to the places. The literature review suggests that psychological access is largely determined by cultural symbols. The symbols might welcome or not welcome certain groups of people to the site. One question that arises is if cultural and religion symbols and passive activities in and surrounding Seremban Urban Park play a significant role in influencing the decision to go there. This research will try to understand the aforementioned phenomenon. Additionally, a sense of territoriality is also important to control social interaction because of its ability to provide security, self-esteem, and self-identity. The sense of territoriality is also influenced by culture. Looking at the nature and surrounding context of Seremban Urban Park, this research will try to understand if a sense of territoriality is a factor in influencing whether people go to Seremban Urban Park.

Finally, it is apparent that very little research has been done about Malaysian urban parks and open spaces. Therefore, this study will also provide a basis for further research by providing a baseline description on what people's needs and preferences are, as well as the factors that influence people choosing go to urban parks in Malaysia.

# **CHAPTER 3: CONTEXT OF THE SITE**

The purpose of this chapter is to provide information about Seremban Urban Park in a larger context. The context consists of the history of Seremban Urban Park, its surrounding location, the use of land around it, and the characteristics of the park's users. Understanding these contextual factors is important because they shape the needs and uses of Seremban Urban Park.

### THE LOCATION OF SEREMBAN



Figure 1: Map of Malaysia and location of Seremban

Seremban Urban Park comprises 44.11 hectares (109 acres), in an older, southeastern section of the city of Seremban, the capital of Negeri Sembilan, a state in Malaysia. Malaysia is located in Southeast Asia, between the Equator and ten degrees North latitude. It consists of Peninsular Malaysia, or West Malaysia, and East Malaysia, or the island of Borneo. Negeri Sembilan is located in the central part of West Malaysia (Figure 1). Seremban is located about 20 Kilometers (12.5 miles) from Putrajaya, the national capital of Malaysia. The North-South Highway and the North-South railway line link it to other major

cities in Malaysia, including Ipoh, Alor Setar, Kuala Lumpur, and Johor Bharu. Seremban is only about one hour from Kuala Lumpur International Airport (Figure 2).

The Malaysian Department of Statistics estimated that Malaysia had a population of 23 million people in the year 2000 (Malaysian Department of Statistics, 2001). 80% of the population lives in Peninsular Malaysia, and 62% live in urban areas. The city of Seremban has a population of 383,982 people. 45% are Malay, 41% are Chinese, and 14% are Indian (Malaysian Department of Statistics, 2001).

Seremban is located in the most developed region in Malaysia. Its proximity to Kuala Lumpur and Putrajaya, and its efficient transportation infrastructure, has transformed Seremban into a major trading hub and industrial city. Since 1990, Negeri Sembilan has benefited from a massive influx of new investment in industrial sectors, such as electronics, bio-chemical production, and furniture. These investments have improved the economy of Seremban and have made more employment opportunities and social services available. In addition, as the capital of Negeri Sembilan, Seremban houses most state agencies and a few federal offices (Seremban Municipal Council, 2002).

Seremban's recent development has resulted in an increase in population in the city and the state. The 2001 census (Malaysian Department of Statistics, 2001) shows a 31% increase in Seremban's population from 1991 to 2001, with an annual growth rate of 4.19%. People have come to live and work in or around Seremban because of the massive increase in business and work opportunities. Consequently, new townships, such as Seremban II and Nilai have sprung up around Seremban. Because Seremban has become more urbanized, dense, and busier, it needs to build a better urban infrastructure.

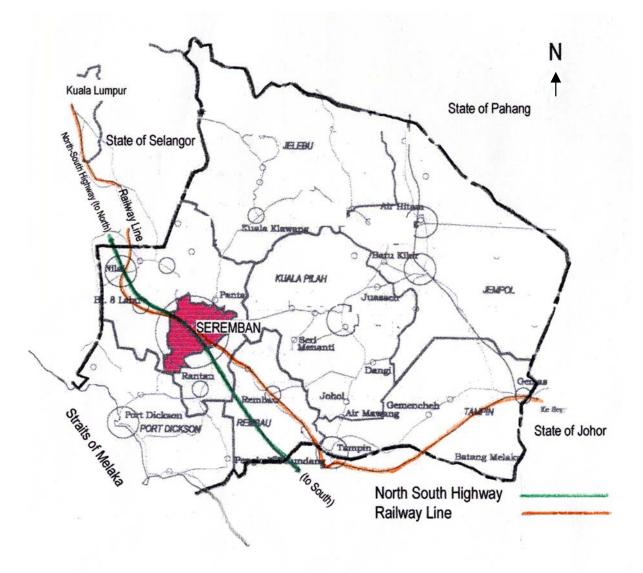


Figure 2: Map of Negeri Sembilan and location of Seremban

Since 1990, the city of Seremban has upgraded its transportation and utility infrastructure to meet the needs of its increased population. In addition to the North-South Expressway, which was completed in 1989, the city has added three new highways. These highways provide better access to Seremban and act as a catalyst for development. Many housing areas and light industrial areas have been developed near the highways, and these have, in turn, brought more development, industry, jobs, and people to Seremban. In addition to its new roads and highways, Seremban has upgraded its inner city transportation infrastructure with the construction of a new bus and taxi terminal. The new bus station provides intra-city services, while the older bus terminal offers inner city and vicinity services. Furthermore,

Seremban has also expanded its water infrastructure over the past ten years to meet the greater demands of its citizens. Since 1990, the city has added two water treatment plants, and it is upgrading its existing water supply and treatment plants. These renovations are scheduled to be completed in 2015 (Seremban Municipal Council, 2002).

However, investment in the city's public space infrastructure has been more limited. Although the city has a population of almost 400,000 people, it has only two parks and one Municipal playing field. Seremban Forest Recreation Park is a new public open space that the Seremban Municipal Council opened in 1999. It is adjacent to the northeast boundary of Seremban Urban Park. It offers camping sites, amphitheatres, BBQ areas, and restrooms. The park is popular for family days and motivation camps, and is mainly used by groups from companies and government offices. However, because Seremban Forest Recreation Park imposes fees, Seremban Urban Park is the only free public open space for jogging, walking, and passive activities. Thus, it is the major park in the city. Seremban Municipal field provides a soccer field; however, this field is the only playing facility available at the Municipal field.

In Seremban, public life occurs in the street and in city open spaces, such as the parks and council field. In the city center, public life occurs in the streets or "kaki lima" (covered five foot walkways) along the shops. This is because the "kaki lima" are places where people can walk and shop, and the displays, rest areas, shop houses, and residences are well protected from sun and rain. However, the value of "kaki lima" as a space for public life has diminished because very few people live in shop houses today. A shop house is a multi-use building in the city, in which people live as well as shop. The living areas of the shop house are now mostly used as stores. Furthermore, commercial public life has moved into indoor areas, such as shopping malls and supermarkets.

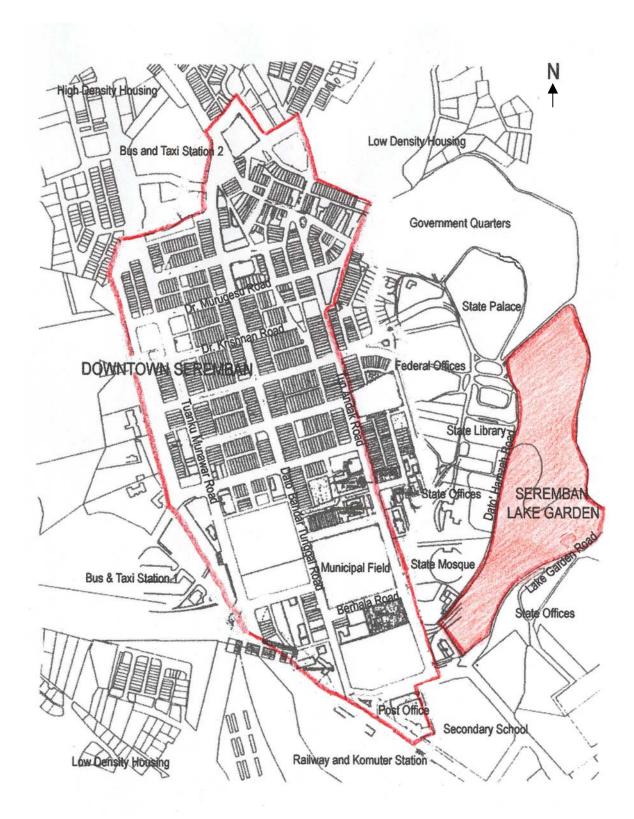


Figure 3: Map of Down Town Seremban

With Seremban's expanding population, the need and demand for better public spaces is increasing. The Seremban Municipal Council's announcement that it plans to upgrade Seremban Urban Park is timely because Seremban needs new and better parks to improve its quality of life. In particular, the city needs an effective park that is open to the public, free of charge. It is important to understand that the location of Seremban is strategic for economic development; this will make the city continue to expand and develop. Every plan for expanding the city infrastructure must consider this fact for its future development.

#### THE HISTORY OF SEREMBAN URBAN PARK

Seremban Urban Park was built by the British Colonial Government in the early 1900's. A report by Seremban Municipal council estimates that the park was built between 1900 and 1930. Also, according to the Seremban Municipal Council, the site of the current park was a formerly a tin mining area. Tin was mined at the site during the earliest regent of the Royal Highness Tuan Tengku Muhammad, the Sultan who ruled Malaysia from 1888 to 1933. While no one absolutely knows when and how long the mining activities lasted on the site, it is not surprising that the space was used for this purpose. Seremban, which is located within Sungai Ujong District, is known for the richness of its tin deposits.

After the mining stopped, the British Colonial Government turned the site into a park. It designed an English park, with a romantic landscape, undulating land, meadows, and a curvilinear path for passive activities. The lakes that are associated with the park today were originally tin mining lakes. Changing an area from a mine to a park was not new to the British Colonial Government, as is demonstrated by two other mining areas that they changed into parks. In fact, the only three parks that the British Colonial Government built in Malaysia, Seremban, Taiping, and Kuala Lumpur, were all formerly mining areas.

It is not surprising that the British developed a park in Seremban, as it was the center of British Administration for Negeri Sembilan, Malacca, and the Northern Johor region. The park was mainly used by British officers and royal family members, who lived around its periphery. In addition to residences for British officers and royal family members, the British also built their offices within the park vicinity. The park remained under British administration until Malaysia gained its independence on August 31, 1957. After independence, the Seremban Municipal Council took control of the administration of the park, and they opened it to the public, making it available to all segments of the population.



Figure 4. Park's amphitheatre which has deteriorated



Figure 5. Park's stage which has deteriorated

However, after 1990, the park suffered from a lack of maintenance, which resulted in physical deterioration, and fewer people came to the park. In 2001, the Seremban Municipal Council announced that it intended to renovate the park. The public and the federal government warmly welcomed this proposal. The National Landscape Department agreed to allocate Ringgit Malaysia (RM) 4.3 million (USD 1.14 million) to improve the park. The main objectives of this redevelopment are to maintain the park as the major green lung of the city, to preserve its history, and to provide a suitable public recreation space for the people of Seremban.



Figure 6. One of the park's lakes that has dried



Figure 7. Park drain system that has deteriorated



Figure 8. Park drain system that has deteriorated



Figure 9. Overgrown shrubs and trees along a walkway

The renovation of Seremban Urban Park should be successful, because it has all the advantages necessary for it to become a great urban public space. It is located near the downtown area and library, and is surrounded by government offices, residential areas, and hotels. In addition, the project also has the support of the people and government of Seremban. However, planners must carefully consider every aspect related to the park's renovation. Perhaps the most important of these is the needs, preferences, and expected experiences of the people who will use the park. An inability to meet these needs is one major reason that many urban open spaces fail (Carr *et al.*, 1992).

### DESCRIPTION OF THE PARK AND ITS SURROUNDING LAND USES

Seremban Urban Park is surrounded by government offices, residences, and commercial office spaces. The British built the quarters and the offices when they ruled Negeri Sembilan. Today, instead of British officers, locals live and work in the government quarters and offices. Most of these residents belong to the Malay ethnic group. The government's offices and quarters are located at the west and northwest side of the parks. Currently, the British Residence, located near the northeastern corner of the park, is the official residence of the Chief Minister of Negeri Sembilan. The Royal Palace is located near the northwestern corner of the park, and The State Guest House is located on its eastern side. The only recent changes to the surrounding land use are the State Mosque, which was built in the late 1980's on the western side of the park; a fast food restaurant located south of the park; and two hotels, the Alson Klana and Hilton, which were built in the late 1990's at the eastern side of the park.

These places can be accessed from the south of the park, which is also the main entrance, via Lake Garden Road and Dato' Hamzah Road. These roads are two driveways that encircle Seremban Urban Park and can be accessed through the Seremban Downtown area. The Minor entrances are from Dato' Abdul Malek Road and Lieutenant Adnan Road at the Northeast. These two roads are accessible from the Seremban Public Library and Government Offices.

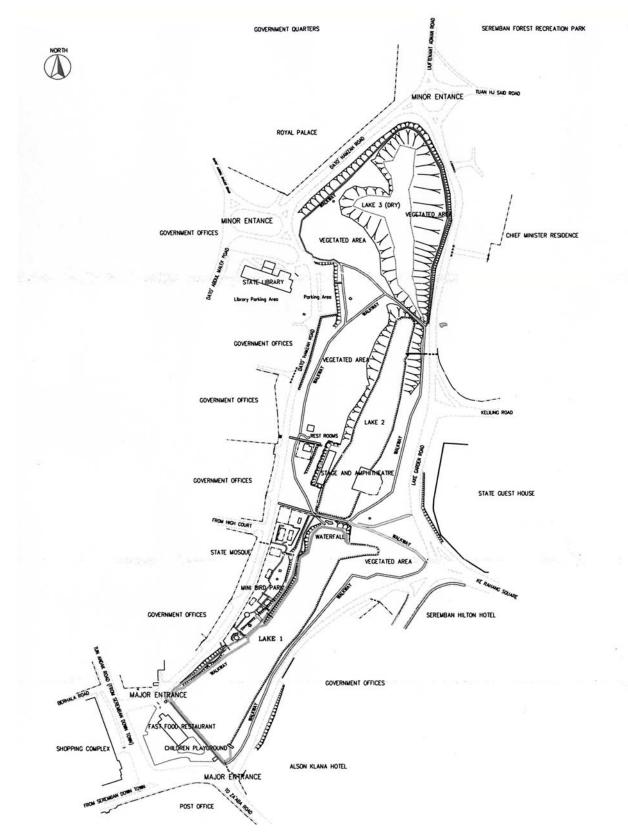


Figure 10: Seremban Urban Park

The park is surrounded by the government quarters, government offices, a state mosque, the official residence of the State Chief Minister, a royal palace, and hotels. Most of these places are used for specific purposes. For example, people only come to the government offices if they have business there. In other words, there are no museums or office tours provided for people who want to know about the offices. While more than a thousand people work in the government offices, the majority of the workers do not live near the park. Many of the government workers use the park in the afternoon for exercise, and sometimes the offices use it to host social gatherings for their workers, such as the family day office picnic. The government quarters are used by high-ranking government officials.



Figure 11. View of Seremban Downtown at the southeast section of Seremban Urban Park

The state mosque is open twenty-four hours a day, seven days a week, and holds five services per day. During each service, there are about fifty participants. However, the mosque is crowded during mandatory services for Muslim males, which are held every Friday. It is estimated that more than 500 people visit the mosque at noon on Fridays. Visitors to the mosque, regardless of their background, must follow the Muslim dress code, which requires that certain parts of the body be covered. Furthermore, all visitors to the mosque must remain silent. The Official residence for the State Chief Minister and the

Royal Palace are not public spaces or buildings. People are not allowed to enter these facilities. However, they are open to the public for a few days every year, including Eidul-Fitri (a Muslim holiday) and the King's birthday.



Figure 12. State offices showing traditional Malay architecture



Figure 13. View overlooking one of the Park's lakes with State Mosque in the distance

In summary, the land surrounding Seremban Urban Park is used for a wide variety of purposes, but most of these purposes are very specific and specialized. Consequently, these places do not support public life in the city; most of them are used for public administration.

This is important because of the possibility that the use of the park might be constrained by the uses of the surrounding land. In addition, because the park is close to the mosque, some people might feel uncomfortable coming to it, as they might feel that they have to behave in a certain manner and follow Muslim rules. Moreover, as the State Mosque exhibits Islamic architecture and symbols, it is possible that people from other religions and ethnic groups may feel unwelcome in the park.



Figure 14. View from the east side of the park overlooking government offices

Seremban Urban Park, also known as Seremban Lake Garden, is the green lung for Seremban. The park is only fifteen to twenty minutes walking distance from the downtown area, and is accessible via public transportation. However, only taxis can go directly to the park. City buses only stop at the Seremban Bus Stations, which are located in the southwest and the north side of the city. People have to walk about 30 minutes from these bus stations to get to Seremban Urban Park.

Currently, most of Seremban's citizens live in the suburban area at the periphery of the city. These people cannot walk to the park. They need to have cars or use public transportation. However, the parking facilities at Seremban Urban Park are very poor. While there are a few parking spaces provided in the park in front of the public library, most people have to park their cars in either the mosque's parking area or the library parking areas. People who live in the city center, especially in the shop houses in the downtown area and government quarters,

do not have parking problems; they have a ten to fifteen minute walk to Seremban Urban Park.

Seremban Urban Park cannot be seen from the downtown areas. Even though the park is located on one of the highest spots in the city, it is not high enough to be visible from all over the city. The Park is only visible when people pass by Tun Andak Road in front of the post office and the secondary school. People notice that there is a park when they see vast green open spaces with bodies of water between the government office and the mosque. Currently, a fast food restaurant near the entrance to the park is the dominant landmark indicating its location.

In summary, Seremban Urban Park is strategically located to allow all segments of Seremban's population to come to the park, especially those who live in the downtown area and governments quarters. However, few people live close to the park. The many people who live in the suburbs of Seremban, such as Seremban Two, need to have their own means of transportation, or they need to use public transportation to get to the park. However, since there is no bus service that goes directly to the park, people have to walk for 30 minutes from the bus station. This accessibility problem is only exacerbated by the park's lack of visibility. This leads one to wonder if people feel that their access to the park is limited by the park's distance from their homes, the way they have to travel to it, or the its lack of visibility. In short, do people feel unwelcome at the park or unable to come to it because of its obscure location?

Seremban Urban Park offers both passive and active recreation to its visitors. Passive recreation includes places to sit, picnic, and rest. In addition, the lakes and natural features, such as trees and shrubs, are attractions for people who like to engage in passive activities with nature. People can engage nature by walking through the park trails and walkways. However, there are no interpretative signs along the trail that can help people to explore and learn about the park. In addition to the plants and lakes, Seremban Urban Park also has a mini bird park, which it allows park patrons to enter free of charge. This is a big cage where

the city council keeps various species of birds. However, there is no interpretive information indicating the species of the birds in the cage.



Figure 15. Lawn or picnic area in Seremban Urban Park



Figure 16. View of the mini Bird Park

Jogging is the most popular recreation activity in Seremban Urban Park. Many people use the park's jogging trails, especially in the morning and late afternoon. There are no courts or fields for soccer, netball, badminton, or sepak takraw (Malaysia's traditional game). However, people play soccer on the lawn in the north section of the park. This lawn area, which was previously a lake, has dried up for unknown reasons. The lawn is also a popular place for people to perform tai-chi, a traditional Chinese exercise, in the morning. The park has a playground for children, located next to the fast food restaurant, at the park entrance. This playground was built with the cooperation of the fast food restaurant. However, it is too small to cater to the needs of the many children of Seremban. Other facilities provided at the park include restrooms and parking areas. Unlike workers in western countries, workers in Malaysia do not use parks during lunchtime because of the hot and humid weather. Most of the time, workers go to the food stalls or to a cafeteria for lunch.



Figure 17. One of the jogging tracks found in Seremban Urban Park



Figure 18. People playing soccer on the dry lake bed

In summary, facilities in Seremban Urban Park provide for both active and passive recreation. For passive activities, the park has an abundance of available natural features. These natural features can be used for scenery, shade, reflection, and exploration. As far as active recreation however, the activities are limited to jogging, because there are no facilities for people to engage group activities, such as soccer. This leads to several questions. For example, what is the general pattern of park usage in Seremban and Malaysia? What recreational activities do park patrons prefer? Are people satisfied with the natural environment of the park, or do they want more? Do people want more active recreation facilities? Planners must answer these questions if they hope to design better parks for Seremban and Malaysia.

### THE PEOPLE OF MALAYSIA AND THEIR DISTRIBUTION

As we saw earlier, Malaysia's population was estimated to be 23 million in the year 2000. 62% of this population lives in urban areas (Malaysian Department of Statistics, 2001). Malaysia is a multi cultural society, and has three major ethnic groups: the Malay, who comprise 65.1% of the population; Chinese, who comprise 26%; and Indians, who comprise 7.7%. Other ethnic groups comprise 1.2% (Malaysian Department of Statistics, 2001). Because the Malays are the majority population in Malaysia, Malay is the official language, and English is a second language.

In addition to being multicultural, Malaysia is also a multi-religious society. As 60.4% of its population are Muslims and Islam is the official religion of Malaysia. Other popular religions include Hinduism (6.3%), Buddhism (19.2%), and Christianity (9.1%) (Malaysian Department of Statistics, 2001). The Malaysian population is highly mixed, making it "one of the classic examples of [a] multicultural society" (Oii, 1999, pp. xviii).

The Chinese and Indians immigrated to Malaysia in the early 1800's. The British Colonial Government brought in the Chinese to work in tin mining areas, and the Indians to work in rubber and oil palm plantations. Meanwhile, the Malay, as one of the native peoples in Malaysia (other natives are indigenous people and indigenous Sabah and Sarawak; Malay are the majority), mostly live in rural areas and work as fishermen, paddy planters, and civil servants (Hua, 1983 and Jomo, 1986). The segregation of work places, work types, and places to live were part of a "divide and conquer" policy adopted by British Colonial Government (Hua, 1983) to control people, and to keep them from rebelling against colonization

Later, most of the mining towns became trade and business towns, and the Chinese, instead of laboring in mining companies, started to get involved in business and trade. In the mid-1950's, cities and towns such as Kuala Lumpur, Penang, Ipoh, and Seremban had a Chinese majority (Hua, 1983 & Jomo, 1986). The Indians remained in the plantations and worked as laborers, and the Malay stayed in rural areas. The divide and conquer policy not only dictated where people lived and what they did, but also where they were educated. There are three school systems available in Malaysia: Malay schools, Chinese schools, and Indian schools. In addition, affluent members of the Malay, Chinese, and Indian societies attended English-style schools that were set up by the British.

Public life was also segregated in Malaysia during the British Colonization. In most of the towns and cities, public life historically took place along the streets. People who lived in the

shop houses, mostly the Chinese, usually used the "kaki lima" (a five-foot walkway corridor along the shops) as a place to socialize. On the other hand, in the rural areas, where the Malays are the majority, public life took place in community halls. The Community hall, also known as "Balai Raya," was a place for community meetings and playing games. It was generally built next to the village chieftain's house and the village mosque. It usually had a playing field and game courts. For the Indian communities who lived on plantations, public life occurred in the community fields that were built by plantation companies

This "divide and conquer" policy was extremely successful. When Malaysia declared independence in 1957, the majority of the Chinese lived in urban areas, the Malay lived in rural areas, and the Indians lived on plantations. Each group occupied its own cocoon, separate from the others. Each ethnic group had its own culture, religion and language. Every ethnic person had his or her own territory.

In terms of economic wealth, the Chinese are the wealthiest ethnic group in Malaysia, followed by the Malays and the Indians. One of the reasons that the Chinese are so wealthy is because of their early involvement in trade and business. However, after the racial riots in May 13, 1969 between the Malays and the Chinese, the government made efforts to integrate the different ethnic groups. It introduced the New Economic Policy, or NEP, which tried to narrow the economic and social gaps among the races in Malaysia. It instituted programs to bring more Malays and Indians into the cities. Agencies such as State Economic Development Agency built new townships, creating new industries and markets. Finally, the government revamped the educational system, bringing more opportunities for the poor, mostly Malays and Indians, to go to schools, universities, and technical schools.

However, from 1970 to 1990, not much was accomplished, because the guerilla war against the Communist Party of Malaya, which started in 1948, was still raging, and most of the government expenditures went to the army. However, after a cease-fire treaty in 1991 and an economic boom in the1990's, most of the projects planned under the NEP took place. Many townships were built under the State Economic Development Agencies. Most of the new towns were built in the periphery of old towns. In addition, in 1991, the government launched the National Economic Policy (NEC).

NEC is an extension of NEP. One of its main objectives is to transform Malaysia from an agricultural-based economy to an industrial one. It introduced new incentives and tax levees to convince investors to build factories in Malaysia. To further this switch to an industrial economy, the government transformed many plantations into housing and industrial areas. Because of NEP and NEC, many people moved from the country to the city; Malays and Indians became more educated, started to live in the cities, and worked as professionals and traders. The Malays and Indians who migrated to the cities had few choices; as urban dwellers, they had to live alongside the Chinese in urban or suburban areas. However, even with all ethnicities living side by side, the evidence of the divide and conquer policy can still be seen in Malaysia. In most of the cities, the Chinese are still the dominant ethnic group, even though their majority is much lower than it was in 1957. There are still many skeptics among the poorer ethnic groups, and in 2001, a racial riot exploded in Kuala Lumpur. Even though this riot was far smaller than the 1969 one, it still reminded Malaysians about the importance of living in harmony for peace and stability.

In 1957, the Chinese were the ethnic majority in Seremban. However, a 2000 census shows that the Malays have now become the majority. Seremban is one of the cities where the Malay gained a majority due to the urban migration between 1970 and 1990. As we saw earlier, Seremban's population of 383,982 has an ethnic breakdown of 45% Malay, 41% Chinese, and 14% Indian (Malaysian Department of Statistics). Today, the Chinese in Seremban mostly live in the shop houses in downtown Seremban or in housing areas near the city center or downtown. Most of them run businesses in Seremban. Meanwhile, Malays live in the new suburban areas around the city, such as Seremban II and Nilai, or in government quarters around Seremban Town Park. The Malays mostly work in government offices or run their own businesses. In addition, the Indians mostly live in suburban areas, where they run their own businesses or work in the private sector.

The literature review notes that a sense of territoriality is associated closely with culture (Walmsley, 1996 and Sommers, 1977). Considering the historical context and ethnic divisions of Seremban today, Seremban Urban Park, which is surrounded by government offices and quarters, in which the majority of the workers and dwellers are Malay, may discourage Chinese and Indians from visiting the parks. These ethnic groups may feel that the park is not their territory. Furthermore, the state mosque and royal palace, both of which are strongly affiliated with the Malay culture, are next to the park. Therefore, Malays might be the majority of users in the park because the government quarters and offices, the state mosque, and the royal palace display Malay and Islamic architecture and thus discourage other ethnic groups.

Does the segregation that occurred in post-independence Malaysia still influence potential patrons of Seremban Urban Park? It is unclear if all ethnicities are equally represented in terms of park usage. However, other parks in Malaysia seem to be equally used by all ethnic groups. A report by <u>The New Straits Times</u> (February 1, 2002) about park usage in Kuala Lumpur shows that every segment of the population (ethnic, gender, and age groups) uses the park equally. This leads to the following questions: are people in Seremban Segregated in their use of parks and open spaces? Is the sense of territoriality for Seremban Urban Park still affected by ethnicity, culture, and language? Do religions icons play roles in influencing people's sense of territoriality? These questions are very important for the designers of Seremban Urban Park if they hope to ensure that every ethnicity has equal access to the park.

### ECONOMIC AND SOCIAL CLASS CONDITIONS

Historically, Malaysia has been economically dependent on agricultural products and tin. For years, tin, rubber, palm oils, coconuts, and cocoa were the major Malaysian export items. However, since 1990, Malaysia changed its policy from an agriculture-based to an industrial-based country. Additionally, the discovery of oil on Malaysia's east coast in 1976 fostered industrial growth in the1990's. Today its primary exports are electronic goods, natural gas and oils, and chemical products. These are worth USD97.8 billion a year (Malaysian Department of Statistics, 2001).

The policy shift from agriculture to industry resulted in Malaysia's rapid economic growth, which averaged 8% each year from 1990 to 1997. After an economic slump, which lasted from 1998 to 1999, the economy rebounded with an 8% economic growth in 2000. Malaysia's per capita income in the year 2000 was RM10, 300 (USD2, 700), nearly triple the per capita income in 1985, RM3, 500 (USD920) (Malaysian Department of Statistics, 2001). The Government cited its 1971 New Economic Policy (NEP), its 1990 National Economic Policy, and its privatization efforts as factors for its tremendous economic growth in 1990's. <u>Utusan Malaysia</u> (August 24, 2000) reported that the Malaysian standard of living has massively improved since Malaysia gained independence in 1957. According to this report, in 1970, before the government instituted NEP, 49.3% of the population was rated poor. By 1997, the percentage had dropped to only 6.8%. In addition, the economic gaps among the ethnic groups also decreased. In 1970, 65% of the poor people were Malay, 26% were Chinese, and 39.2% were Indian. However, the number of poor people has decreased, with Malays at 9%, and non-Malay at 4% in 1997. From 2000 to 2002, the unemployment rate consistently remained between 4% and 3%.

Rapid economic growth in 1990's resulted in the expansion of Malaysia's middle class. These new middle class citizens usually work in the service sectors as professionals, such as engineers, architects, lawyers, and surveyors. Their living styles are different from their ancestors because they are more urbane and sophisticated. They have money to spend on vacations and other types of recreation. The <u>Far Eastern Economic Review</u> (June 3, 1997) reported that evidence of Malaysia's reshaping by new cultures includes pubs, restaurants, and nightspots. The article noted that "They have mushroomed in the suburban areas to cater to the affluent middle class" (Jayasankaran, 1997). Unfortunately, this economic growth has a downside. The article also reported that, because of the economic success in Malaysia, new problems have emerged, including spouse and child abuse, illegitimate birth, incest, and teenage gangs.

This phenomenon raises the following questions: does the rapid economic growth of the 1990's, which resulted in the expansion of the middle class and possible changes in the quantity and type of leisure activity, affect the use of parks and recreation areas in Malaysia? Have people stopped coming to Seremban Urban Park because they have found new ways to entertain themselves rather than going to parks with family and friends? Did people come to the park before 1990 because it was the only place where they could afford to go for fun and recreation?

The literature review notes that the semi-autonomous class in the United States is the primary user of parks and wilderness (Walker & Kielcolt, 1995). The semi-autonomous class is a subset of the Wright Typology of Class (Walker and Kielcolt, 1995), which has minimal control over economic capital, and the physical means of production. This class is a middle-income group. According to the research, they go to the park to have fun and socialize because parks and wilderness help to alleviate the stress caused by their work environment. However, in Malaysia, middle-income citizens, the semi-autonomous class, reportedly spend their time in clubs, bars, and nightspots, or on vacation. Research is needed in Malaysia to confirm if this report is true and to discover if social class plays a vital role in determining who uses Seremban Urban Park.

In addition to research needed to verify whether social class plays a vital role in influencing potential patrons of Seremban Urban Park, other questions arise. For example, what is the role of urban parks in the lives of members of these emergent societies? Which patterns of usage in the park must be determined? Do people decide to go to the park based on ethnicity, social class, or both? What will happen to public life and public spaces if people find other places for fun, recreation, and social activities? It is important to answer these questions if planners hope to design better spaces for public life.

### CONCLUSION

Seremban Urban Park was built by the British Colonial Government in the early 1900's. It had been used by the British and Malay autocrats for passive recreation and relaxation. In

1957, Seremban Municipal Council took over the park management after Malaysia gained independence, and opened the park to the public. Currently, the park is facing a lack of use, physical deterioration, and a negative public perception. In the year 2000, the Seremban Municipal Council announced that it would renovate the park to better serve the needs of its patrons. It is important to understand people's needs and preferences for the park in order to design a more effective public space.

Contextual analysis shows that Seremban is located in a major economic corridor. The city is connected with expressways, railway lines, and an airport. Therefore, the city is on a track for further expansion and population growth. Any plans for Seremban Urban Park should consider these locality factors because both the diversity and number of park patrons will increase in the future. Seremban Urban Park is accessible from the city by walking, and is particularly accessible for people who live in areas adjacent to the park and elsewhere in the city center. In addition, the park is also accessible by car. However, the city of Seremban does not have enough parking spaces, and the majority of its public transportation facilities do not bring people to the park. The only transportation available is the taxi. People who come by bus have to walk for more than 30 minutes to get to the park, and people who come by car have to use parking areas that do not belong to the park. Therefore, accessibility may be a factor affecting current use of the park.

In terms of surrounding land uses, Seremban Urban Park is surrounded by government offices, government quarters, a mosque, a palace, and the official residence for the State Chief Minister. The land use is passive in usage and very specific. It is possible that people do not use the park because they are not comfortable with its surrounding context. In addition, the architecture of the mosques, palace, and offices, which indicate Malay and Islamic influence, may make certain ethnic groups feel unwelcome in the park.

In terms of activities, the park offers both active and passive recreation. It is blessed with an abundance of natural features that can enhance passive activities in the park. However, it has a minimum number of active recreation facilities. Jogging is the primarily active recreation available in the park. There are no facilities for other forms of active recreation, such as

soccer or court games. People have to manipulate the park to accommodate their needs for active recreation. This suggests a need to assess preferred activities before renovating or redesigning the park.

Historically, Malaysian society has been segregated for a long time. After it gained independence in 1957, and particularly after a racial riot in 1969, the government took steps to reduce tensions among ethnic groups. The New Economic Policy (NEP) and National Economic Policy (NEC) were introduced to narrow the social and economic gaps among races. However, the government was not able to proceed with all these programs until 1990. However, racial tensions remained high among Malaysians, leading to another racial riot in 2001. This research tries to understand whether the presence of culturally specific elements, such as the State Mosque and other Malay-style buildings affect the use of the park by non-Malay ethnicities.

Contextual analysis also shows that Malaysia has undergone a rapid transformation in its living style. The economy boomed in the 1990's, and Malaysia's per capita income has grown almost three-fold since 1985, giving the country tremendous wealth, especially for its expanding middle class. The majority of Malaysians are changing from low-income to middle-class. Research elsewhere suggests that one of the factors that influences potential park patrons is social class. Do upper income people refrain from going to the park because they have other opportunities for recreation and leisure? This research hopes to address these issues because, in all likelihood, the social classes in Malaysia will continue to expand and transform. It is important to inform park designers of these changes, because each social class has its own needs and preferences.

In conclusion, this contextual study has highlighted issues related to the site, its surrounding context, history, locality, ethnic distribution, and social class, which might play a role in shaping people's needs and preferences for Seremban Urban Park. This study will provide basis for further research by providing a baseline description on what people need and want in their parks, and factors that influence whether or not people go to urban parks in Malaysia.

### **CHAPTER 4: METHODOLOGY**

This chapter describes the methods used to answer the research questions, and explains why the researcher chose these methods. It is divided into 7 segments: Study Design, Questionnaire Design, Organization of Questionnaire, Sample Population, Pre-Test, Data Collection Procedure, and Data Analysis.

### **STUDY DESIGN**

To answer the research questions, research methods have been designed that emphasize descriptive findings obtained from questionnaires. Descriptive findings were chosen because the intention of this study was to describe phenomena in Seremban Urban Park. In addition, this research was intended to meet two specific research objectives:

- 1. To provide baseline information regarding factors that influence whether people go to Seremban Urban Park
- 2. To explore the nature and scope of people's needs and preferred activities, related to the use of Seremban Urban Park

As Mitra, and Lankford (1999) suggest, it is important to understand the objectives for the procedures before designing the research instrument. The three objectives for this procedure were:

- 1. To determine the factors influencing people to go to Seremban Urban Park
- 2. To determine the factors influencing people not to go to Seremban Urban Park
- 3. To identify people's needs and preferred activities for Seremban Urban Park

Factors that may influence peoples' decisions to go to the park have been examined to determine what data to collect. Four factors: social class, accessibility, context, and sense of territoriality, were identified from the literature review. These four factors helped the researcher to construct questions and identify variables that were necessary to answer the research questions. In addition, the literature review identified a checklist of potential human needs that can be satisfied through the use of urban parks. This research has provided a basis

for developing questions regarding user needs and preferred activities in Seremban Urban Park.

Data was obtained using questionnaires. The questionnaire method was chosen because it provides insights into people's beliefs, attitudes, values, and behavior (Sommer and Sommer, 1991). Another method that is available to answer research questions is the interview. However, the questionnaire was chosen over interview because questionnaires can reduce the possibility of interviewer influence over participants based on his or her way of questioning (Sommer & Sommer, 1991). In addition, the selection of questionnaire over interview was also based on the following advantages outlined by Mitra and Lankford (1999):

- 1. They permit a person a considerable amount of time to think about an answer before responding. This means that the respondents do not have to answer immediately after the question is asked. They can answer at their leisure and at their own pace (Mitra and Lankford, 1999).
- They provide greater measurement uniformity than interviews. Therefore, data can be more easily analyzed. The questionnaire allows participants to answer the exact same questions.
- Questionnaires are better suited to large random samples (Mitra and Lankford, 1999). For this study, the sample population was large, as it was intended to measure a citywide opinion. Therefore, the questionnaire was the most appropriate method.

### **QUESTIONNAIRE DESIGN**

The questionnaire is designed to meet research objectives and to answer research questions. Closed-ended and open-ended questions were used to measure people's attitudes toward Seremban Urban Park. According to Sommer and Sommer (1991), closed-ended questions are used when the researcher wants the participants to choose from a set of predetermined questions that have alternative answers. The researcher provides the alternatives. In other words, researchers want confirmation of the answers in a specific scale for a measurement.

On the other hand, open-ended questions give participants more freedom to answer the questions.

According to Sommer and Sommer (1991), open-ended questions are desirable when the researcher does not know the answer to a question, the range of possible answers becomes so large that the questions would become unwieldy in multiple choice format, the researcher wants to avoid suggesting answers to the participants, or the researcher wants answers in participants' own words. Furthermore, open-ended questions are very useful for gathering salient opinions from the participants. The questionnaire was designed to be as simple as possible, and variables were grouped within four factors: socio-economic status, accessibility, sense of welcome, and territoriality. Other questions were based on the list of peoples' needs and preferred activities, related to the needs identified in the literature review.

### **ORGANIZATION OF THE QUESTIONNAIRE**

For this research, related questions were grouped together within the questionnaire. This seemed logical, as it enabled easier variable connection for data analysis and was simpler for participants to have one question flow to another (Foddy, 1993). For example, Questions 1 - 5 are about the familiarity of participants with the parks, and Questions 6 - 10 are about how participants react in the park.

For open-ended questions, respondents were not given any choices or indications on how to answer. However, it was important to prevent participants from being influenced by suggestion from earlier questions. According to Zeisel (1979), "Early questions can influence the way respondents answer later ones" (p. 160). For example, Questions 3 and 5 are open-ended questions. There, they are placed at the beginning of a set of related questions in order to avoid any contamination from the closed-ended questions.

For Question 11, 15, 16 and 17, a Likert scale was used to rate participants' attitudes toward and understanding of the park. Rensis Likert developed this scale (1932), and it has been

widely used by researchers because it provides opportunity for participants to indicate degree of agreement on a certain subject by using categories such as "agree," "strongly agree," and "disagree" (Sommer & Sommer, 1991).

Many researchers agree with the recommendation that questionnaires should begin with general questions and end with specific demographic ones. Demographic questions are considered easier to answer, and putting them at the end of a questionnaire allows participants to answer the least difficult questions when they are most fatigued and bored with the survey session.

The survey questionnaire was developed in two languages, Malay and English, to make sure that all Malaysians understood it. The survey form in the Malay language was intended for Malay people, and the survey in English was provided for Chinese and Indian participants. Even though English is a second language in Malaysia, many Malay do not understand English very well.

### SAMPLE POPULATION

The research population consisted of the public in the city of Seremban. The public was chosen because they are the potential users of Seremban Urban Park. However, the population was restricted to adults above eighteen years of age. It was restricted to the adult population because the researcher assumed that children and teenagers have different reasons and needs for going to a park. In addition, the activities of children and teenagers in Malaysia are largely subject to their parents' approval and supervision. Even though children might be a reason for going to the park, parents still decide whether or not to go. Furthermore, adults are the largest segment of the population.

This restriction was important because it enabled the researcher to design the instrument to fit the focus group. Since one of the objectives of this research was to understand the factors that might influence whether or not people go to parks, the population was surveyed both inside and outside the park. The survey outside the park took place in public spaces in

downtown Seremban. According to Schulman (2001), for statistical analysis to be valid and reliable, the number of participants, or sample population, must be at least 30 people. Therefore, if more than one sample needs to be taken, each sample must have a minimum of 30 people. Because of the age and ethnicity restrictions on this research, a stratified sample was used to query the population. According to Mitra and Lankford (1999), to make sure that the sample covers all groups of people in the demographic sample, it is important to obtain a representation of the different groups of people based on each group's percentage. However, to get more reliable results and minimize error in the statistical analysis procedure, an approximately equal number of each group was surveyed.

The next question was how many respondents were needed for this research. According to Mitra and Lankford (1999), the most common assumption about sampling is that 10% of the population must be surveyed to get a reliable result. However, if the population sample is too large, a sample population with sampling error less than 5% is justified. (The 2001 Census indicated that Seremban's population was 383,982; Malaysian Department of Statistic, 2002). To calculate the sampling error, the researcher used the formula advocated by Mitra and Lankford (1999),<sup>3</sup> which determined that, for 200 participants, the sampling error would be 3.5%. Therefore, a sample of 200 participants was an appropriate estimate for this survey. In addition, it was calculated that, to ensure a maximum 5% sampling error, the sample could be reduced to no fewer than 120 participants. However, it was the research intention to get 200 samples, since up to 10 % of the surveys could be invalid or unclear, and thus unusable.

### **PRE-TEST**

It is recommended that every research questionnaire be pre-tested by a group of people to assist the researcher with clarity. According to Sommer and Sommer (1991), "The impressive economy of the questionnaire is partially offset by the researcher's inability to clarify the meaning of terms" (p. 138).

<sup>&</sup>lt;sup>3</sup> Sampling error = square root of [(p) (1-p)/proposed sample size], where p is the probability that the condition exists. However, since the actual p value is not known before the survey, the p value is assumed to be 50% (Mitra and Lankford, 1999).

A pre-test was conducted on February 16, 2002. Eight volunteers, consisting of Malaysian students at Virginia Tech, participated in the pre-test. Of the eight students, four were ethnic Malay, two were ethnic Chinese, and two were ethnic Indians. These volunteers were not included in the final sample. The Malay participants were presented with a survey form in Malay, while the Chinese and Indian participants were presented with the survey form in English. During this session, the participants were briefed with the purpose, layout, and content of the survey. The participants tried to answer the questionnaire and raised any possible problems that they faced in doing so. The pre-test participants found several problems pertaining to wording and typing errors, and felt that one question was unclear. The pre-test revealed no serious problems, and minor amendments were made to the survey questions. The survey questionnaire later underwent a review by the researcher's committee members, and was finalized.

### **DATA COLLECTION PROCEDURES**

It is important to establish a procedure to collect the data. The procedure was important because it provided a framework for the researcher in terms of a timeframe and methods, since the data collection involved a citywide population. The researcher's representative in Malaysia conducted the survey. Therefore, the procedure became much more important to help the researcher and his representative get a good response rate, provide guidelines for approaching participants, and maintain uniformity of participants and data.

Data collection proceeded over a 4-day period (February 26 and 27, and March 4 and 5, 2002). Six surveyors were involved in the first two days of the survey, and two surveyors were involved in the subsequent two days. The researcher's representative was present for all four days of the survey. Before surveying, all the surveyors were briefed on the survey procedure and survey question clarification. Two follow up briefings were made to the researcher's representative to address any questions that arose during the survey.

### **DATA ANALYSIS**

The data was entered into a database to be analyzed. The analysis of the data was important because the data and results of the analysis generated the research findings and implications. For this study, the data was analyzed using descriptive statistics and content analysis. To facilitate the descriptive statistical analysis, the researcher used SPSS 10.0 for Windows software. The descriptive analysis provided an analysis using frequency, mean, and factor analysis.

Frequency distribution was used to provide information regarding distribution and cumulative frequencies of the different data obtained from the questionnaires associated with certain factors and variables. A mean measure was used to determine the average number of participants associated with certain variables. According to Sommer and Sommer (1991), there are very few extreme scores among participants drawn from the same sample, and this makes the mean measure more valid. Therefore, the mean measure was justified to be appropriate for examining the data. The frequency cumulative effect and mean measure could tell how many participants chose certain variables and each variable's average; this made it easier to measure each participant's response.

Factor analysis was used to provide information about peoples' needs. The analysis provided lists of groups of people's activities, and the list provided information on the most and least preferred activities. The analysis was done by comparing each variable mean correlation. As Kaplan and Kaplan note, "If a correlation between two variables is relatively high (close to 1.0 and above 0.8), then if one knows how much one of the variables is liked one can predict fairly accurately the extent of preference of the other variables" (Kaplan & Kaplan 1989, p. 212). Further, "The analysis of the most and least preferred variables can be very useful" (Kaplan & Kaplan, 1989, p. 211) and can provide insight into peoples' needs and preferences.

Meanwhile, content analysis was used to analyze the open-ended questions. Content analysis is a "technique for systematically describing the form and content of written or spoken

material" (Sommer and Sommer, 1991, p. 169). Content analysis allows for simultaneous application of quantitative and qualitative measures (Sommer and Sommer, 1991). The data is classified based on the broad theme or major themes. Data that overlaps or duplicates in meaning is be placed on the same classification or major theme. The frequency of each classification and major theme is a basis to understand peoples' responses and attitudes. It was noted that the results of a content analysis are descriptive rather than explanatory (Sommer and Sommer, 1991).

### **CHAPTER 5: ANALYSIS AND FINDINGS**

### APPROACH

This chapter uses data analysis to assess factors influencing whether people go to Seremban Urban Park. The analysis also tries to meet the research objectives:

- To provide baseline information regarding factors that influence whether people go to Seremban Urban Park
- To explore the nature and scope of people's needs and preferred activities. Related to the use of Seremban Urban Park

The findings are organized around four factors identified from the literature review that may influence potential patrons of Seremban Urban Park. These are social class, accessibility, the degree to which people feel welcome in the park, and the participants' sense of territoriality.

This chapter will be divided into 4 sections. The first section describes the survey participants. It explores variables related to the participants' backgrounds, specifically their ethnicity, gender, age, and socio-economic position. This section analyzes who is going to the park and who is not, based on these variables. The second section contains findings related to the factors influencing participants' decisions to go to Seremban Urban Park. The variables here will be familiarity, accessibility, surrounding physical context, land use, and sense of territoriality. The third section contains findings related to participant's needs and preferences for Seremban Urban Park. It groups and ranks these needs and preferred activities. Finally, the fourth section summarizes the findings.

### DESCRIPTION OF PARTICIPANTS AND THEIR INVOLVEMENT WITH SEREMBAN URBAN PARK

This study surveyed 196 participants over a period of four days in the city of Seremban. The distribution of the sample is stratified according to the ethnicity, gender, age, education, and income of the participants. From 196 participants, only 20 participants (about 1/10 of sample

populations) were surveyed inside the park. The sample size of 196 is sufficient to guarantee a sampling error of plus and minus 5%. However, the data suggests that only gender and ethnicity variables (Malay, Chinese and Indian) are equally distributed within their variable set. Three of the variables, income, age and academic level, are not distributed equally within their variable set. This suggests that some findings cannot be drawn conclusively because of the inequality of the sample distribution. Please refer to Table 1.

## Table 1Participant Distribution

<u>Distributions</u>	<u>Number (n)</u>	Percentage (%)
<u>A. Overall Participants</u> <u>B. Gender Distribution</u>	96	100.0
Male	94	48.0
Female	101	51.5
Missing	1	0.5
C. Ethnic Distribution		
Malay	75	38.3
Chinese	61	31.1
Indian	59	30.1
Missing	1	0.5
D. Age Distribution		
18-30 yrs old	87	61.7
30-40 yrs old	45	23.0
40-50 yrs old	15	7.7
50-60 yrs old	11	5.6
60 and above	2	1.0
Missing	2	1.0
E. Academic Level		
Secondary school	87	44.4
Cert/stpm/Diploma	73	37.2
Bachelor & above	34	17.3
Missing	2	1

F. Income		
Below RM1000	104	53.1
RM1000-3000	74	37.8
RM3000-6000	7	3.6
RM6000 and above	2	1.0
Missing	9	4.6

The most significant demographic variables include people who have been to the park within the past year, ethnic diversity, and gender distribution. The data indicates that, of the 196 participants, 63.3% have come to Seremban Urban Park within the past year, and 34.2 % have not. This is surprising because general observation of the use and condition of the park itself suggests that few people visit it. Even though 63.5% seems high, there is anecdotal evidence to suggest that other parks in Malaysia are more popular. Reports by the <u>New Strait Times</u> on January 11 and February 2, 2002 regarding the use of three urban parks in Kuala Lumpur, Malaysia, indicate that they are used fairly intensively. The parks in Kuala Lumpur are so popular that even people "living outside Kuala Lumpur and Selangor have been coming over [on] weekends with their families" (Gunaratnam, S. 2002).

This finding suggests that people still go to Seremban Urban Park, even though it is not well maintained. However, Seremban is the only free park in the city. Thus, people might not have any other place to enjoy the outdoors and engage in park activities. As the only urban green space in the city that people have the opportunity to visit for free, it may receive far more patrons than might otherwise be expected.

Ethnic distribution indicates that all ethnic groups use the park almost equally. Of the Malay participants who indicated that they had been to the park, n: 73 participants, or 69.9%, said that they had been there within the past year. Of the Chinese participants, n: 59, or 61.0% had done so. Finally, n: 58, or 62.1% of the Indian participants said that they had visited the park within the past year (Please refer to table 2). Statistically, it seems that Malays are the dominant users of Seremban Urban Park, because, of the 64.6% participants who indicated that they had been to the park within the past year, 26.8% were Malay. Malays were closely followed by the Indian and Chinese participants, each of whom comprised 18.9% of park

patrons. However, this does not strongly suggest that Malays are the prime users of the park, because there is only a 7.9% difference between them and the other groups. This is fairly insignificant.

### TABLE 2

Ethnic Distribution	among users	of Seremban	Urban Park
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			<b>ETHNICITIES</b>	
<b>Distributions</b>	<u>Numbers</u>	<u>Malay</u>	<u>Chinese</u>	<u>Indian</u>
Not at all	n.	22	23	22
	%	30.1	39.0	37.9
Yes	n.	51	36	36
	%	69.9	61.0	62.1
Total	n.	73	59	58
	%	100.0	100.0	100.0

Cross analysis of when each ethnic group uses the parks also reveals no significant difference. Every group prefers to come during weekends, and on weekday mornings, and late afternoons. There are many factors that explain why people come during these times. The first is climate. Malaysia, including Seremban, has a hot and humid tropical climate, and afternoon temperatures can reach 100 degrees Fahrenheit. The hot and humid conditions do not encourage people to come to the park in the middle of the day. They prefer to come to the park in the morning and late afternoon because temperatures are lower during these times. In addition, the mature trees and shrubs shade the park, unlike the rest of the city, which has relatively sparse vegetation. The second factor is free time. People come in the morning, before they go to work, or in the afternoon, after they have finished. This is also a reason why people prefer to come to the park during the weekend. Saturday and Sunday are public holidays in Malaysia, and it is common for people to go out and spend time with friends and family during these days.

The finding concludes that ethnic diversity is not a major determining factor among patrons of Seremban Urban Park. These findings contradict Knopf's (1987) suggestion that human behavior differs between cultures because people respond toward the environment as a collection of "past experience and repositories of accumulated emotions and meaning" (pp. 786). However, the finding cannot determine whether each ethnic group engages in different activities in the park because the research did not ask questions related to this issue. Thus, this finding sparks a new question: do different ethnic groups in Malaysia engage in varying park activities? Research in the United States shows that different ethnic groups engage in varying activities (Sideris, 1995 and Rishbeth, 2001). Further research is needed to explore this phenomenon in Malaysia. The data also indicates that all of the ethnic groups use the park on weekdays mornings, and late afternoons, and on weekends. Thus, the data suggests that climate and free time are the major factors that influence the time that potential park patrons use the park.

In terms of gender distribution, males slightly outnumbered female visitors to Seremban Urban Park. 53.7% of all patrons were male, while 46.3% were female. However, 61.2% of people who indicated that they had not visited the park within the past year were female (Please refer to table 3). Mean analysis indicates that the males' score is 1.72, and the females' score is 1.58 (Mean analysis; 1.0 is for not at all and 2 is for yes). The finding suggests that females do not use the park as much as males. However, the finding is not highly significant. A counter analysis with ethnicity shows that their absences are not related to culture, because there is no major difference among Malay, Chinese, and Indian females for this variable (36.6%, 36.6% and 26.8% respectively from 61.2% of females who indicate they have not been to the park). Therefore, the female presence, or lack thereof, in the park does not appear to be related to culture.

In addition, the finding suggests that most females who go to the park are accompanied by friends, family, or spouses. Only 2 female participants (3.4%) indicated that they come to the park alone, as opposed to 15.5% (n=11) of males. This finding supports a conclusion by Mozingo (1988), who claims that females use urban open spaces differently than males. She concludes that this phenomenon happens because males and females have "differences [in

their] perception of spaces and concept of optimum space experience" (pp. 46). In other words, females are more sensitive to their environment; for example, they are more concerned about safety. Further research is suggested to confirm this finding about gender related preferences for park use in Malaysia.

### Table 3

			GENDER	
<b>Distributions</b>	<u>Numbers</u>	Male	Female	<u>Total</u>
Not at all	n.	26	41	67
	%	38.8	61.2	100.0
Yes	n.	66	57	123
	%	53.7	46.3	100.0
Total	n.	48.4	51.6	100.0

### Gender Distributions among users of Seremban Urban Park

Regarding socio-economic position, the data suggests that, as socio-economic level increases, use of the park decreases. The mean analysis of the variables concerning socioeconomic groups shows that the mean for participants who hold a high school diploma and come to Seremban Urban Park is 1.67, while participants who hold a bachelors degree and above is 1.54 (Mean analysis; 1.0 is for not at all and 2 is for yes). Meanwhile, the mean for participants who have incomes lower than RM1000.00 is 1.70, while the mean for participants who have an income more than RM6000 is 1.00 (Mean analysis; 1.0 is for not at all and 2 is for yes). These findings support the conclusion made by Walker and Kielcolt (1995) that socio-economic level plays a role in influencing people to go to the park. The data suggests that the lower income group is more likely to use the park than the higher income group. However, statistically, the data distribution does not strongly support this finding, because the data variables for these categories are not equally distributed. Equal distribution among categories within variables is needed to strongly support this finding.

# FACTORS INFLUENCING POTENTIAL PATRONS OF SEREMBAN URBAN PARK

### **Social Class**

As the previous finding shows, there is not enough evidence, due to the unequal distribution of data, to conclude that socio-economic position is a factor influencing potential patrons of Seremban Urban Park. However, from content analysis of the question regarding why participants do not come to Seremban Urban Park, the most popular reason cited was that they were "busy" (37%). In this context, "busy" means that the participants have no time and are too involved with work. The question therefore arises: are "busy" people stratified by social class? A cross comparison of "busy" responses with income disclosures shows that only 5 out of 15, or 33.3%, of those who cited "busy" as a reason for not going to Seremban Urban Park have an income higher than RM3000. This suggests that the amount of leisure time available is not tied to income level. In addition, the tentative conclusions of this data suggest that, as far as Seremban Urban Park is concerned, socio-economic position is not a major influence upon the decision to go to the park. Clearly, however, more research is needed in this area.

### Accessibility

The literature review suggests that accessibility may play a role in influencing the decision to go to Seremban Urban Park. There are two types of accessibility, physical and psychological. Physical access is measured by how far the park is from where people live, the time it takes people to travel, and the method that they use to travel. Meanwhile, there are two types of psychological access, visual and social. Visual access is usually related to the conditions of the park and how it can give the impression of security to its users. Social access is related to signs and symbols, which indicate that only certain users are welcome in the park. Visual and social accesses are closely related to context and the sense of welcome that the place offers (McKenzie and McKenzie, 1978 and Carr *et al*, 1992).

Regarding physical access, the data suggests that 59.7% of participants who indicated that they had not been to the park within the past year lived more than five kilometers from it. Only 10.4% of them indicated that they lived within two kilometers of the park. In addition, 10.8% of the participants stated that they did not go to the park because it was too far from where they lived. On the other hand, of 124 participants who indicated that they had been to the park, 49.3% reported that they lived within five kilometers of it, and 50.7% reported that they lived more than five kilometers from it. While the number of park users who live more than five kilometers from the park is nearly equal to those who live less than five kilometers away, the questions arises: how do participants who live at the greater distance travel to the park? The data indicates that 41.9% of them traveled to the park by car, and only 11.9% took public transportation.

Another question arises: do 41.9% of the participants who traveled to the park by car occupy a strong economic position? The data suggests that there is no clear relationship between economic position and mode of travel. The data shows that 48.6% of participants whose income was below RM1000 traveled to the park by car. The findings suggest that accessibility to Seremban Urban Park is highly related to how people travel. This finding supports the conclusions of Lynch and Carr (1965), who claim that physical access is a key factor for people who come to urban spaces, and that the physical access must be proximate, short and direct. The finding also supports a suggestion by Roggenbuck and Lucas (1987), who indicate that, the farther the park from the population center, the lower its attendance.

### Sense of Welcome and Physical Context

The participant's sense of welcome is closely related to visual and social accessibility. The literature review suggests that, psychologically, people are less inclined to enter certain places if the places display signs and symbols that indicate that they belong to other groups of people (Carr et al, 1992). At Seremban Urban Park, the surrounding land uses and structures seem to be predominantly Islam and Malay in appearance, so it should be interesting to observe if the surrounding land use context affects a potential patron's sense of welcome and accessibility.

To ascertain if participants' sense of welcome and accessibility was affected by the surrounding land use, the survey asked them if the land uses around Seremban Urban Park made them less inclined to come. They rated their impressions of welcome and accessibility by using a three-point Likert scale, in which 0 symbolized "I don't know," 1 symbolized "yes," and 2 symbolized "no." The land uses that the survey tested included the Royal palace, State mosque, government offices, State guesthouse, government quarters, public library, and the Chief Minister's residence.

For participants who indicated that they had not been to the park within the past year, all the land uses recorded a mean of less than 1.5, except for the Chief Minister's residence (Royal Palace: 1.435, State Mosque: 1.410, Government offices: 1.349; State Guest House: 1.333; Government quarters: 1.340;; and Public Library: 1. 485; and Chief Minister's residence: 1.800). The mean analysis suggests that the score lies between the interval 1.3 < x < 1.7, and is in a neutral zone. This suggests that, among people who did not go to the park within the past year, the decision was not influenced by the surrounding land use.

On the other hand, among participants who had been to the park within the past year, all the means for variables had a value higher than 1.5 (Royal Palace: 1.649; Minister Residence; 1.564; State Mosque; 1.649; Government Offices: 1.667; State Guest house: 1.6154; Government quarters: 1.556;; and Public Library: 1.6836). Even though the data suggests that the mean for people who had been to the park was higher than for people who had not, the means also lie between 1.3 < x < 1.7, which is a neutral zone. This finding suggests that the sense of welcome is not affected by the surrounding land uses because the data shows that both groups of participants lay in the neutral zone, interval 1.3 < x < 1.7.

In addition to discounting participant feelings about surrounding land uses, the finding suggests that these land uses do not affect patron enjoyment of the park. Within a three-point Likert scale, in which 1 indicated "Discourage," 2 indicated "Neutral," and 3 indicated "Enhance," participants recorded a value mean within the interval of 1.5 < x < 2.5 for all variables. This finding suggests that patron enjoyment of the park was not affected by the

surrounding land use, and strengthens the finding that surrounding land uses did not make people less inclined to go to Seremban Urban Park (Please refer to Table 4).

#### Table 4

### Mean for Patrons' enjoyment in Seremban Urban Park

<u>Places</u>	<u>Means</u>
Public Library	2.416
State Mosque	2.2480
State guest house	2.0488
The Royal Palace	2.0164
Chief Minister Residence	1.9917
Government Offices	1.9836
Government quarters	1.8306

It is logical to assume that the surrounding land use for Seremban Urban Park might affect certain ethnic groups' sense of welcome. To ascertain if certain ethnic groups feel less inclined to go to Seremban Urban Park, it was necessary to cross analyze the ethnic groups (Malay, Chinese and Indian) with participants' inclination to visit the park. The data suggests that all land uses means for all ethnicities lay between intervals 1.3 < x < 1.7, within the neutral zone. This suggests that surrounding land uses did not affect the participants' sense of welcome. In addition, it was worthwhile to cross analyze ethnicity and the question of whether or not surrounding land uses affect any cultures' feelings toward and enjoyment of the park. The means showed that, for all ethnic groups (Malay, Chinese and Indian) all variables lay between the intervals of 1.5 < x < 2.5. This suggests that surrounding land use did not affect any cultures' enjoyment of the park.

In summary, the data suggests that surrounding land use did not affect participants' sense of welcome to Seremban Urban Park. In addition, patron enjoyment of the park also was not affected by the surrounding land use. Cross analysis with ethnic groups also shows that no ethnic group (Malay, Chinese and Indian) felt that their sense of welcome and enjoyment was affected by the surrounding land use. Therefore, the surrounding land use and physical context did not affect the patrons' sense of welcome and enjoyment in the park, and was not a factor influencing their decision to go to Seremban Urban Park.

### Sense of Territoriality

Sense of territoriality represents another potential influence on participants' decisions to go to Seremban Urban Park. The literature review suggests that sense of territoriality is higher when a place provides security, comfort, and meaning to its visitors (Porteous, 1977). To understand if sense of territoriality affected participants' decisions to go to Seremban Urban Park, the participants rated their feelings about security, comfort, and pride towards the park using a five-point Likert scale.

The data suggests (please refer to table 5) that participants who indicated that they had not been to the park within the past year had a mean value that lay within a neutral zone (interval 2.5 < x < 3.5) for the first three variables, security, comfort, and pride. For the remaining three variables, insecurity, discomfort, and nothing, the mean value lay within the moderately low zone (interval of 1.5 < x < 2.5). The data suggests that people who had not gone to Seremban Urban Park within the past year had neutral feelings towards the park.

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Presence	<u>Secure</u>	<u>Comfortable</u>	<u>Proud</u>	Insecure	<u>Uncomfortable</u>	<u>Nothing</u>
Not at all	2.5410	2.7377	2.5410	1.8852	2.2131	2.2381
Yes	3.6230	3.8618	3.2683	2.1500	2.0826	1.8934
Total	3.2623	3.4891	3.0272	2.0608	2.1264	2.0108

### TABLE 5Mean for Sense of Territoriality toward Seremban Urban Park

On the other hand, participants who indicated that they had been to the park within the past year had moderately high feelings toward it. Their mean values lay within the interval of 3.5 < x < 4.5 for the first three variables, security, comfort, and pride. In addition, for the last three variables, insecurity, discomfort, and nothing, the mean values lay within the interval of 1.5 < x < 2.5. This is moderately low. It shows that people who had been to the park within the past year had a moderately high sense of territoriality toward it.

Previous studies suggest that the sense of territoriality is also closely related to the distance between the participant's home and the place he or she is visiting. Researchers have suggested that the greater the distance, the lower the sense of territoriality (Porteous, 1977 and Walmsley, 1986). The data indicates that 49.3% of people who go to the park live within five kilometers of it; therefore, one may assume that these people have a higher sense of territoriality for the park than people who do not go to it and live more than five kilometers from it. This finding suggests that a sense of territoriality is a major factor influencing the decision to go to Seremban Urban Park, and that it is related to how far people live from the park. This finding supports the suggestions of Porteous (1977) and Walmsley (1996), who indicate that distance plays a role in providing a sense of territoriality.

### Table 6

Presence	<b>Ethnicity</b>	<u>Secure</u>	<b>Comfortable</b>	<u>Proud</u>	<b>Insecure</b>	<u>Uncomfortable</u>	Nothing
No	Malay	3.50	3.30	2.60	1.90	2.85	2.14
	Chinese	1.82	2.41	2.32	1.60	1.64	2.26
	Indian	2.32	2.53	2.74	2.21	2.21	2.32
	Total	2.54	2.74	2.54	1.89	2.21	2.24
Yes	Malay	3.20	3.63	2.96	2.12	2.22	1.98
	Chinese	3.44	3.75	3.22	2.36	2.22	2.17
	Indian	4.52	4.43	3.83	2.0	1.76	1.54
	Total	3.64	3.90	3.29	2.16	2.09	1.90

In spite of the difference in perception of territoriality between people who go and do not go to the park, a cross examination of the data with ethnicities suggests that there are no significant differences between ethnic groups. For participants who do not go to the park, the means for all variables of all three ethnic groups (Malay, Chinese and Indian) lay within low to neutral zones (interval of 1.5 < x < 3.5). For patrons of the park, the means for the first three variables (security, comfort, and pride) for all three ethnic groups lay in between neutral to the moderately high zone (interval 3.0 < x < 4.5). The other three variables

(insecurity, discomfort, and nothing) lay within the moderately low zone (interval 1.5 < x < 2.5) [Please refer to table 6]. The data reflects the overall means for all groups. The findings do not show that culture differences affect the sense of territoriality, as Porteous (1977), Sommers (1977), Walmsley (1996), Sideris (1995) and Rishbeth (2001) suggest. Further research is needed to verify this finding, and show whether there are cultural differences influencing participants' sense of territoriality for Seremban Urban Park.

The data suggests that the sense of territoriality is a factor influencing potential visitors to Seremban Urban Park. In other words, there are territorial differences between participants who go to Seremban Urban Park and those who do not. These differences are largely issues of security, comfort, pride, and distance from home. However, statistically, the sense of territoriality toward Seremban Urban Park is not high among patrons. The park can do far more to increase this sense of territorial ownership.

### **Other Factors**

In addition to the factors that the literature review identifies, three factors emerged as important influences upon participants deciding whether or not to go to Seremban Urban Park. These factors are activities provided in the park, presence of a natural environment, and park maintenance.

### Activities

Providing opportunities for active recreation in Seremban Urban Park is important because the data suggests that, during leisure time, people engage in active recreation activities. 40.4% of participants who went to the park within the past year, and 18% of the people who did not, indicated that they engage in active recreation during their leisure time (Please refer to Table 7A & B). In addition, an analysis of the reasons that people did not go to the park indicates that 17.7% of them felt that the park was not exciting. Their reasons included their beliefs that the park had nothing to offer, did not have many active recreation activities, and was boring.

## Table 7Content Analysis of Participants' Leisure Times

#### Content Frequencies Percentage (%) 42 Active recreation 40.4 40 38.5 Passive activities Computer related activities 9 8.6 4.8 Social and family 5 5 House keeping 4.8 3 2.9 Special interest Total 104 100

### A. Content Analysis of Leisure Times for Seremban Urban Park Patrons

## B. Content Analysis of Leisure Times for Participants who have not been to Seremban Urban Park

<u>Content</u>	<b>Frequencies</b>	Percentage (%)
Passive activities	23	46
Active recreation	9	18
Special interest	6	12
Computer related activities	5	10
House keeping	5	10
Social and family	2	4
Total	50	100

The data suggests that those people may come to the park if it offers more active recreation activities. Moreover, most of the suggestions for Seremban Urban Park call for more activities, mostly active recreation, followed by water-related and family-oriented activities. From the content analysis of participants' recommendations, active recreation falls into two categories, physical recreation facilities and programmed recreation activities. Participants proposed a variety of physical recreation facilities, including gymnasia, swimming pools, bicycle lanes, and camping sites. They also proposed programmed recreation activities, including marathons and aerobics classes. This data supports the assertion of Carr et al (1992), who say that active recreation is important to enhance participants' preferences and experiences in urban open spaces, because "activities engagement represents a more direct experience with a place and the people with it" (p. 118).

From the content analysis on the question of what participants do in their leisure time, 24.2% of patrons of Seremban Urban Park indicated that they engaged in passive activities. 46% of people who did not go to the park within the past year indicated that they engaged in passive activities during their leisure time. However, only 5.6% of participants suggested more passive and nature-related activities for Seremban Urban Park. The data is not surprising, because 82% of participants indicated that its natural environment is the reason that they like Seremban Urban Park. This means that the majority of the participants are satisfied with the passive and nature-related activities available in the park. Thus, it is clear that passive activities are also a priority for patrons of Seremban Urban Park.

In conclusion, activities are an important factor in influencing participants' decisions regarding whether or not to go to Seremban Urban Park. The data suggests that passive activities are the main factor driving participant visits, moreover participants also want more active recreation activities. This finding supports the list of needs that Carr et al (1992) establish, in which they suggest that active and passive activities are important needs to be fulfilled in urban open spaces.

### Natural Environment

The presence of natural environment is a key factor influencing visitors to Seremban Urban Park. Polled on what they like the most about Seremban Urban Park, 82.6% of participants indicated that its natural environment (view, nature, fresh air, peace, and fauna) was their most important reason for visiting the park. In addition, analysis of their recommendations for the park suggests that they would like to have more water-related activities in the park (29.1%). As water is a natural element, this shows that people want to engage with nature. This is not surprising, because research regarding preference for natural environments suggests that water is the most important environmental element. Water has a strong symbolic meaning for mankind (Knopf, 1987 and Kaplan, 1977). In terms of the relationship between nature and activities, 5.6% of participants indicated that they would like to have passive activities that help them engage with nature, such as viewing natural scenery, relaxing in the garden, and relaxing next to the lakes.

Participants consistently cited natural environment in response to survey questionnaires about what they like in the park and what they want enhanced. Therefore, it is clear that the natural environment is a factor influencing whether participants use Seremban Urban Park. This finding is consistent with research done by Kaplan and Kaplan (1977) regarding people's preference for a natural environment. The Kaplans conclude that people always prefer natural environments, particularly information-rich ones, because humans are information-hungry creatures who amass knowledge to ensure survival. They further conclude that information-rich environments are complex, coherent, legible, and mysterious. Whyte (1980) also notes that natural elements are important factors in attracting participants to urban open spaces. His study in New York City regarding how people use urban spaces reveals that sun, wind, water, and trees are always attractive elements in these spaces.

#### Maintenance

Poor maintenance is the main reason participants cited for not visiting Seremban Urban Park. From the content analysis, 59.0% of participants cited lack of maintenance as the most important factor leading them to dislike the park. Most of the time, their maintenance complaints related to the dirty, drying, and smelly condition of the lakes. Another maintenance-related factor was litter. People do not like to see litter, and many participants felt that this was a problem in the park.

Thus, maintenance is a major factor influencing participants' decisions regarding whether or not to go to Seremban Urban Park. Carr and others (1992) link maintenance with park management. They propose that a management program should be formulated during the design phase and should be reviewed during both the construction and post-construction phases. Maintenance is important to ensure that urban spaces remain intact for patron enjoyment, security, and comfort (Carr et al., 1992). Rutledge (1986) points out that management should be seriously considered during the planning stage of park development to ensure safety of the spaces and equipment and the efficiency of park operation.

# **NEEDS AND PREFERRED ACTIVITIES**

## Procedure

Factor analysis identified the categories or factors influencing participants' perceived needs and preferred activities. This factor analysis identified a preference rating for 35 variables. This analysis helped explain patron needs and preferred activities for Seremban Urban Park, and helped prioritize these needs and activities.

The data was extracted using the Maximum Likehood procedure, and was rotated with the Promax method. The Maximum Likehood method was used because it "eliminated [the] indeterminacies and subjective decisions required by other extraction methods...and... Maximum Likehood estimates contained a powerful invariance property" (Comrey and Lee, p. 109). The Prom ax method was use for extraction because "it gives results comparable to those obtained with other analytical methods, but with less computer time" (Corey and Lee, p. 188). For the first rotation, the eigenvalue was set at 1.0, with a loading factor of 0.4. However, after a cross examination of the scree plot, the number of factors was set at 5, and ten variables with a communality value lower than 0.5 were dropped.

# Observation

Five factors emerged from the factor analysis:

# Factor 1: Passive Observation and Contemplation

This factor refers to people who prefer to engage in passive activities, and involve themselves in observation or contemplation. The psychologically orientated activities in this factor include thinking, visiting the palace, reading and studying, having a picnic, visiting the Chief Minister's residence, and going to the Mosque.

Activities such as thinking, reading, and studying have a psychological component that can be seen in the variable groups in this factor. In addition, visiting the palace and Chief Minister's residence can also be psychological in nature, because doing so involves appreciation for beauty and aesthetics. This parallels the suggestion of Carr and others (1992) that passive activities utilize the features in the site for their physical and aesthetic qualities.

Some researchers have noted that, while engaging in passive activities, people tend to relax. For this factor, relaxation can take the form of contemplation, visiting exhibitions, and reading. This factor relates to the category of relaxation and passive engagement that Carr and others (1992) identify. According to them, passive engagement can lead to a sense of relaxation. The activities are indirect "because [they involve] looking rather than talking and doing" (Carr *et al*, p. 105).

# Factor 2: Passive Observation and Socializing

The variables in this factor are passive activities involving observation and socializing, and include relaxing next to the lakes, being with people with similar interests, spending time with friends, escaping from the stress of the city, and viewing natural scenery. This factor is similar to factor 1, Passive Observation and Contemplation. The difference is that this factor has socializing activities as one of its components. Passive and observational activities in this factor include relaxing next to the lakes, escaping from the city, and viewing natural scenery. Like factor 1, this factor also provides a sense of relaxation.

The socializing component involves being with people with similar interests and spending time with friends. According to Carr and others (1992), socializing is a part of active engagement: "Active engagement represents a more direct experience with a place and the people within it" (p. 118). The most important active activity here is direct contact with people for socializing. It can come from chatting with either friends or strangers (Carr *et al*, 1992). Socializing is grouped in this particular factor because being with people with similar interests and spending time with friends can also be classed as a passive activity. For example, people can talk with each other while relaxing next to the lakes and observing the scenery.

## Factor 3: Exploration

Learning about trees and shrubs, getting to know the park and its lakes, watching birds, exploring the park, and seeing new things are among the variables included in this factor. Exploration is an active factor that involves learning about the park and surrounding environment. This factor correlates with Carr and others (1992), who identify discovery as a patron need in urban areas.

Carr et al explain that exploration in urban spaces is an "opportunity to observe the different things that people are doing when moving through site" (p. 134). However, for Seremban Urban Park, exploration suggests intellectual engagement and learning about nature. Other activities that can be included in this category are looking for birds in the woods, learning about trees and shrubs, appreciating flowers, and hiking on trails.

# Factor 4: Physical Activities

The variables in this factor are designed to keep patrons in good physical shape, test their physical endurance, help them relax physically, and give them the opportunity to observe people. Consequently, this factor includes active recreation activities. According to Carr and others (1992), adults usually engage in active recreation activities because they rarely utilize recreation as a form of socializing.

Active recreation is the most important aspect of an urban public space that can be specifically designed for a park (Carr *et al*, 1992). Jogging and group playing are the most popular active recreation activities among adult patrons of Seremban Urban Park. The playground is a designated space where children can engage in active recreation activities in the park.

#### Factor 5: Family Activities

The variables included in this factor are activities that promote family togetherness, encourage families to engage in activities as a unit, and allow parents to see children play. This factor includes going to a playground, taking a picnic, and simply walking with one's family. This factor is unique because it involves a specific type of user: a family. This factor

addresses parents' need to relax while engaging in active activities with other family members and the passive activity of observing children playing.

#### **Mean Analysis of Factors**

A mean comparison indicates that factor 5, Family Activities, has the highest mean score, 3.38. It is followed by factor 2, Passive Observation and Socializing, at 3.37; factor 4, Physical Activities, at 2.99; factor 1, Passive Observation and Contemplation, at 2.53; and factor 3, Exploration, at 2.49. This data suggests that factor 5, Family Activities, is the most preferred activity among patrons of Seremban Urban Park (Please refer to Table 8).

The top ranking of Family Activities, Passive Observation and Socializing; and Physical Activities is not surprising, because these three activities are also the major reasons patrons cited for their appreciation of Seremban Urban Park. In addition, the content analysis of participants' responses reflects this appreciation. The third highest recommendation (17.0% of participants) was that more family activities be made available at the park. Active recreation was first (34.1%), and passive activities came in fourth at 5.6%. Factor 5, Family Activities, is also related to the situations in which people go to the park. 34.1% of participants reported that they go to the park with their families.

#### **TABLE 8**

#### **Mean Analysis for Factors**

Factor	Mean
Factor 5: Family Activities	3.38
Factor 2: Passive, Observation and Socializing	3.37
Factor 4: Physical Activities	2.99
Factor 1: Passive, Observation and Contemplation	2.53
Factor 3: Exploration	2.49

The fact that factor 2, Passive Observation and Socializing, came in second after Family Activities is quite surprising. However, although it is ranked second, factor 2's mean is only

0.01 lower than that of factor 5, Family Activities. One might have assumed that active recreation would be ranked ahead of passive activities. However, looking at other data, one reason that factor 2 is ranked higher is its socializing variable. The data suggest that 51.1% of participants went to the park with friends and 34.1% went with family. The data indicates that socializing is an important factor for people who are considering going to the park. The socializing factor confirms the suggestion made by Carr and others (1992) that socializing with friends and strangers is one of the most popular active engagement activities in public spaces. In contrast, factor 1, Passive Observation and Contemplation is ranked at number 4, below factor 3, Physical Activity. This data further support the assertion that the socializing factor is a reason that factor 2 is ranked higher in the mean analysis.

Factor 3, Physical Activity, is ranked third in the mean analysis (mean: 2.99). As discussed above, its ranking in the top three is not surprising, because many people suggested that they come to the park to enjoy active recreation, and participants also noted the need for more active recreation facilities. However, the ranking of factor 2, Passive Observation and Socializing, ahead of Physical Activity indicates that people come to the park to socialize, not just to engage in recreation. Carr et al (1992) also note that active recreation is a way to socialize. Active recreation, such as playing soccer, involves a group of people who are socializing with each other while playing a game.

One probable reason why factor 1, Passive Observation and Contemplation, is ranked fourth in the mean analysis is its connection with the natural environment of Seremban Urban Park. The abundance of natural open spaces in the park, combined with the lack of organized activities, may make people feel that they need to be more physically engaged, and thus indulge less in passive activities. In addition, passive activities, such as sitting next to fountains or lakes and hiking in the woods are common in Malaysia, and participants may expect that these kinds of activities will be provided in any park.

Factor 3, Exploration, placed last in the ranking of means. This finding suggests that people in Seremban are not interested in this kind of activity. Students and people who are interested in plants are usually the only patrons who involve themselves in exploration. The

majority of people pursue other activities. In addition, the current dilapidated condition of the park does not promote much exploration, which may explain why this activity ranked last.

In conclusion, factor analysis extracted five factors or categories of needs and preferred activities. These categories are largely in keeping with the list of needs in urban spaces that Carr and others (1992) identify. The mean analysis for factors reveals that factor 5, Family Activities, is the most preferred activity for park patrons. This is followed by factor 2, Passive Observation and Socializing; factor 4, Physical Activity; factor 1, Passive Observation and Contemplation; and factor 4, Exploration. This ranking is not surprising because it parallels participants' recommendations for Seremban Urban Park and the reasons they cited for visiting the park.

# CONCLUSION

196 participants filled out the survey. Of these, 94, or 48%, were male, and 101, or 51.5%, were female. One participant did not identify himself or herself as belonging to either gender. The ethnic distribution was 75 (38.3%) Malay, 61 (31.1%) Chinese, and 59 (30.1%) Indian. Once again, one participant did not identify himself or herself according to ethnicity. However, age, academic level, and income were not equally distributed within their variables set. The unequal distribution of this data is a concern, because it means that some related findings cannot be conclusively established.

The data confirms that the majority of participants used Seremban Urban Park within the past year. However, with close to one-third of potential patrons recorded as non-users, there is potential to significantly increase park use. The data further demonstrates that gender may be a factor in this relative lack of use. Females do not use the park as much as men. 62% of females indicated that they have not been to the park within the past year. Furthermore, when females go to the park, they prefer to be accompanied by friends or family. A cross analysis between this female preference and Malaysian culture indicates that they have

been to the park in the past one year, the finding is not significant. Further research is needed to verify the finding.

On the other hand, the data confirms that all major ethnic groups use Seremban Urban Park. However, it does not reveal whether all of these groups engage in similar activities. Further research is needed to determine if all three ethnic groups engage in similar or different activities in the park.

The data analysis confirms that accessibility and sense of territoriality are factors influencing participants' decisions regarding whether or not to go to Seremban Urban Park. In addition, three other determining factors emerged from the analysis: available activities in the park, interest in natural environment, and park maintenance. The data analysis suggests that social class, physical context, and sense of welcome are not major influences upon people deciding whether or not to go to Seremban Urban Park.

On the other hand, accessibility is a factor that influences this decision. People who live within five kilometers of the park are its major users. Even though a high percentage of users live more than five kilometers from the park, many of them indicated that they travel with their own vehicles instead of relying on public transportation. The data suggests that how far participants live from the park and their mode of travel influence their tendency to visit the park.

The data suggests that a sense of territoriality greatly influences people with regard to their decision to go to Seremban Urban Park. A survey on how people feel about security, comfort, and pride towards the park indicates that people who have not been to the park have a neutral sense of territoriality towards it. On the other hand, people who go to the park have a moderately high sense of territoriality. In addition, the distance between the park and participants' homes also affects their sense of territoriality. The data shows that 49.3% of people who live within five kilometers of the park indicated that they had been there within the past year. Therefore, it is clear that a sense of territoriality influences the decision to go to the park.

Activities provided in the park are also an important influence upon potential patrons of Seremban Urban Park. For park patrons, active recreation is highly important. Most of the participants indicated that they liked to engage in active recreation during their leisure time. Most of them suggested that the park should provide a wider array of active recreation facilities. In addition to active recreation, participants also indicated that they want to engage in passive recreation. Even though only 5.6% of participants suggested that the park's natural environment. This suggests a high level of satisfaction with the number and types of passive recreational activities currently available in the park.

Natural environment strongly influences whether or not people go to Seremban Urban Park. More than 80% of the survey participants cited Seremban's natural environment as a factor in their enjoyment of the park. Natural environment is also important for providing passive activities in the park. The literature review suggests that the aesthetic quality and beauty of the natural environment attracts people to parks and open spaces (Kaplan and Kaplan, 1977, and Whyte, 1986). Therefore, it is clear that the natural environment is a factor influencing participants' decisions regarding whether or not to go to Seremban Urban Park.

Park maintenance is also another decisive factor that emerged from the analysis. Participants often cited lack of the maintenance as a reason that they do not like Seremban Urban Park. Participants cited the poor condition of the lakes and litter as factors in their negative perceptions of the park. One may assume that, if the park management improved its maintenance programs, this would also improve activities, and attract more people to the park.

An analysis of preferred activities and needs reveals five decisive factors: Family Activities, Passive Observation and Socializing, Physical Activities, Passive Observation and Contemplation, Passive Observation and Socializing, and Exploration. Mean analysis ranks Family Activities as the most preferred activity, followed by Passive Observation and Socializing, Physical Activities, Passive Observation and Contemplation, and Exploration, in that order. Family activities ranked the highest, because 34.1% of participants indicated that they go to the park with family. Furthermore, participants ranked family activities third in their suggestions for activities in the park. Participants ranked Passive Observation and Socializing second, and the data indicates that the socializing factor was a reason for this factor's high ranking. The data suggests that 34.1% of participants come to the park with family and 51.1% of participants come to the park with friends.

Participants ranked Physical Activities and Passive Observation and Contemplation third and fourth respectively because these activities are common in Malaysian parks. People assume that these activities will be provided by any park that they visit. Participants ranked Exploration last in the mean analysis because only certain segments of the population, such as students, choose to explore and learn about their environment. The ranking of these activities is important because, according to Rutledge (1985), preferred needs and activities should not be generalized. They should be situation or site specific. The next chapter will briefly summarize of the study and discuss the findings and their future research implications.

# **CHAPTER 6: CONCLUSIONS**

This chapter summarizes the study, explains its implications for the redevelopment of Seremban Urban Park, and suggests avenues for future research. The chapter is divided into two sections. The first section provides a brief summary of the study, and discusses the research problems, purposes, objectives, methodology, and data analysis. The second section discusses significant findings and their implications, and suggests future research.

# **SUMMARY OF THE STUDY**

Seremban Urban Park is a historical park located in the city of Seremban, Malaysia. It was built by the British Colonial Government in the early 1900's for the use of British officers and members of affluent Malaysian society. After Malaysia gained its independence in 1957, the Seremban Municipal Council took control of the park, and opened it to the public. The park contains lakes, undulating landscapes, and trails that are reminiscent of English Romantic Gardens. However, since 1990, the park has suffered from a lack of maintenance. Physical deterioration has led to a negative public perception and a reduction in park use. In the year 2000, to overcome these problems, Seremban Municipal Council announced a plan to redevelop the park.

In response to these problems, this research tried to provide baseline information and a description of the factors that influence participants' decisions to go to the park. Further, it sought to explore the needs and preferred activities of Seremban Urban Park patrons. This research is justified because there is virtually no other research about urban park usage in Malaysia. Also, this research is timely, as urbanization in Malaysia has grown rapidly over the past decade, increasing public demand for open urban spaces. Finally, this research, which helps to explain participants' needs and preferred activities in Seremban Urban Park, will likely be used for its renovation and as a basis for future park design in other Malaysian cities.

The factors influencing participants' decisions to go to Seremban Urban Park are broad and varied. The literature review, combined with a contextual analysis of Seremban, identified four potential influences on participants' choices to go to Seremban Urban Park: accessibility, social class, context, and sense of territoriality. In addition, research on human needs and preferences supports this choice of factors. Variables examined in this research were derived from the factors discussed in these categories.

This study is based upon data obtained from survey questionnaires. The questionnaires were distributed to 196 participants in Seremban Urban Park and other public spaces in the city of Seremban. The survey was done by the researcher's representatives in Malaysia over a period of four days.

Statistical analysis was used to evaluate the data. Among other factors, the analysis isolated mean, frequency, and content analysis. Factor and mean analyses were used to categorize and rank participant needs. The findings meet the research objectives. They suggest that, of people who come to Seremban Urban Park, male patrons outnumber females, and that all three ethnic groups use the park in relatively equal numbers. The findings also indicate that accessibility, sense of territoriality, available activities, natural environment, and park maintenance influence potential park patrons. Factor analysis reveals five groups of needs and preferences: Passive Observation and Contemplation, Passive Observation and Socializing, Exploration, Physical Activities is the most important for park patrons, followed by Passive Observation and Socializing, Physical Activities, Passive Observation and Contemplation, and Exploration. The next section discusses significant findings, implications, and avenues for future research.

# DISCUSSION OF SIGNIFICANT FINDINGS, IMPLICATIONS, AND AVENUES FOR FUTURE RESEARCH

This section discusses the significant findings of the research and their implications. The discussion is divided into three sections. The first section considers the significant findings and their implications for the planning and urban design of the city of Seremban. The second section discusses issues related to the renovation of Seremban Urban Park, and the third section critically discusses the methodology used in this research.

# Planning and Urban Design Implications for the City of Seremban

#### The Emergences of the Urban Park as an Important Public Space in Seremban

The data confirms that people still come to Seremban Urban Park, regardless of its condition. 63.3% of survey participants had been to the park within the past year. The data also confirms that all ethnic groups use the park equally. People from different backgrounds come to the park, even though the surrounding physical context and land uses seem to prioritize one ethnic group, the Malay. The data also confirms that 50.7% of survey participants come to the park even though they live more than five kilometers (3.12 miles) from it. They travel in their own cars or use public transportation.

Although patrons come to the park regardless of its condition, the research suggests that it is still necessary to upgrade its quality. Because the park is the only free public green space in the city of Seremban, it is likely to be popular regardless of its condition. However, in its current state, it simply does not fulfill the needs and desires of its patrons. For example, it has only one soccer field, which does not meet the considerable demand of park patrons. Furthermore, the realization that people who live more than five kilometers from the park still come to it, clarifies not only the unique position that the park occupies, but also the size of its potential patron base. In light of this data, the needs and roles of the park become much clearer.

The data in this thesis shows that, within the past few years, Seremban Urban Park has emerged as an important space for public life in Seremban. Since the park was opened to the public in 1957, it has slowly replaced traditional public spaces in the city and surrounding area. This transition has become more rapid within the past decade, as Seremban has become more urbanized, industrialized, and densely populated. Traditional public spaces, which are segregated by ethnic groups, locality, and use, have become less important to the public. The relatively constrained earlier gathering spaces, including the "kaki lima," or five foot walkway in front of shop houses, "balai raya," and community fields have been replaced by the urban park<sup>4</sup>.

The transformation began when Malays and Indians started to move to urban areas and the Chinese moved out to suburban areas. These people left not only their traditional homes, but also their traditional public spaces. As a result, this new urban society, composed of Malays, Chinese, and Indians, sought a new kind of public space to support its public life. In Seremban, the Seremban Urban Park became a vital place for these people.

The study shows that park patrons rank family and social activities first and second among their preferred activities and needs. This analysis supports the argument that people have transformed Seremban Urban Park into an important public space in which to enjoy their public life. Additionally, they use Seremban Urban Park as a place to engage in passive activities and active recreation. Consequently, planners must consider the implications of the emergence of urban parks as important public spaces in both Seremban and Malaysia in general.

This finding suggests that there is a critical need for better urban open spaces in Seremban. It highlights the need to upgrade Seremban Urban Park, a finding that is consistent with the decision of the Seremban Municipal Council to initiate a program of improvement. Upon completion of Seremban Urban Park's redevelopment, it will draw more visitors. One future problem that might occur in the park is overcrowding. To address this problem, the

<sup>&</sup>lt;sup>4</sup> See chapter 3: Context for a discussion about the concept of "kaki lima," "balai raya," and "community fields."

Seremban Municipal Council should consider creating more open spaces in the city. These spaces do not necessarily have to be as vast as Seremban Urban Park. They could take the form of small parks, urban plazas, and neighborhood parks. Even smaller parks would attract visitors, and fulfill the needs of the citizens of Seremban. More importantly, they would take some of the stress off Seremban Urban Park, prevent overcrowding, and reduce the costly problem of park maintenance.

In addition to developing better urban open spaces and adding new spaces, the Seremban Municipal Council should rethink the distribution of open spaces in the city and its surrounding areas. Open spaces should not be concentrated solely in the city center. Parks and open spaces should be distributed throughout the city, particularly in highly populated areas. Additionally, open spaces must be equitably distributed to ensure that all segments of the population have access to them, regardless of their background or ethnicity. Furthermore, a comprehensive open space system should be introduced to ensure better use and management of public spaces in Seremban. An open space system would give city planners the opportunity to link all open spaces and recreation facilities within Seremban. This linkage would ensure city dwellers better access to parks, open spaces, and recreation facilities. In addition, the open space system could function as a green corridor, which would improve Seremban's ecosystem by providing spaces for wildlife habitats and storm water.

For future research, it is important to understand how urban spaces have become more important as a result of urban migration and rapid urbanization. The findings of this study should be applied to all park and open space systems in the city of Seremban. A feasibility study on how to distribute open spaces in the city should also be done to uncover both the problems and benefits of such a program.

It is also important to understand the status of traditional urban open spaces and public life in the city. This research did not analyze participant preferences for these traditional spaces, but it suggests that the urban park is emerging as an important urban space. Therefore, questions arise regarding public perceptions of these more traditional spaces. For example, is their popularity and importance declining? What are current user patterns in these spaces? Future research to understand other public spaces, how best to distribute them, and their status among patrons is vital for planning and designing future parks and open spaces in the city.

It is also important for future researchers to understand recreation demands and trends in Seremban. One useful research tool would be a survey of recreation facilities in the city. Future studies should address the status and quantity of recreation facilities, as well as patron satisfaction with and preference for spaces in which to indulge their recreation needs. This research would provide planners with a greater understanding of how to accommodate patron recreation and leisure needs.

#### The Implications for the Renovation of Seremban Urban Park

## Park Activities: Rethinking the Priorities

The data suggests that 42.6% of people who go to the park engage in active recreation during their leisure time. Conversely, 17.7% of those who do not come to the park do the same. Furthermore, most of the survey participants suggested that Seremban Urban Park should provide additional active recreation. They specifically requested gymnasia, swimming pools, soccer fields, and badminton courts. This indicates that people want to engage in active recreation at Seremban Urban Park.

In contrast, people also appreciate the natural environment of Seremban Urban Park. The data indicates that 82% of park patrons cite nature as the most important factor influencing their enjoyment of the park. People love to see natural features, such as plants, trees, shrubs, birds, and lakes. Natural environments are the perfect setting in which to engage in passive activities, such as relaxing, reading, having picnics, escaping from the city, and viewing scenery.

These findings suggest that there may be a conflict between park patrons' needs and preference for activities in Seremban Urban Park. Participants want to have recreation facilities, but also want to experience nature and engage in passive activities. If the participant requests for active recreation facilities are fulfilled by the redevelopment of Seremban Urban Park, the park and the city of Seremban may lose their most valuable asset, the park's natural environment. On the other hand, if the natural environment is protected, the park will not be able to meet the participants' demands for active recreation. These findings suggest one common conclusion: the city of Seremban needs spaces for both active and passive recreation.

Looking at the problems above, Seremban Urban Park needs to rethink its priorities in providing activities. Seremban Urban Park is the only free green open space in the city of Seremban. It has an important history, and it is the only place where people can find mature rain forest trees, fresh air, and a peaceful and calm environment. In addition, besides being a public space for people, Seremban Urban Park is also the green lung for the city. It should be kept as it is today, a place for light recreation and passive activities. If the park is redeveloped to accommodate recreation facilities, most of its natural features will have to be destroyed.

New facilities for active recreation should be built in other places in the city of Seremban. The research demonstrated that these spaces are desperately needed. The municipal field in downtown Seremban simply cannot meet public demand. The space is too small, and it only has a soccer field. A contextual study of Seremban Urban Park indicates that the need for active recreation spaces is so overwhelming that people use its dry lakebed to practice Tai-Chi in the morning, and play soccer in the afternoon. Clearly, new recreation facilities must be built within Seremban. These facilities should be linked to other parks and open spaces for easy accessibility and management.

In summary, the need for active recreation facilities for park patrons is high. However, Seremban Urban Park simply cannot accommodate all the recreation facilities that its patrons require. Development of active recreation facilities would destroy the main asset of the park, its natural environment. This environment is not only important for passive activities, but is also important for the city, as it helps balance the urban ecosystem. Therefore, any plan to improve the park should prioritize preservation of the natural environment. To meet the active recreation needs of its inhabitants, the city of Seremban should look for other places in which to develop recreation facilities. These facilities are desperately needed, as the survey data indicates an overwhelming participant desire for active recreation areas.

While this thesis has shown that park activities are important, it has not identified the specific activities in which park patrons engage. For future research, focused interviews and on-site observation would lead to a better understanding of the specific activities of park patrons, as well as the factors that influence those activities. In addition, a comparative analysis of park use among various Malaysian cultures, religions, and social classes is also essential. These studies are needed to ensure that park developers and designers in Malaysia understand what needs to be provided and what does not. At the same time, research must be undertaken to ascertain patrons' needs in general.

#### Places for Family and Social Gathering

The data suggest that family activities and passive activities, observation and socializing are ranked first and second in the mean analysis. In addition, 51.1% and 34.1% of park patrons reportedly come to Seremban Urban Park with family and friends. Furthermore, 17.0% of participants suggested that the parks need to provide more family activities.

These findings suggest that people prefer to use Seremban Urban Park as a gathering place for families and social activities. The parks seems to be an ideal places for people to be with family and friends. Many survey respondents suggested that the park add facilities for family and social interaction, including picnic areas, playgrounds, seating areas, and plazas where people can socialize. The demand for these facilities is high; if added, they will be well used by the people, and help ensure the future success of Seremban Urban Park. In addition, Seremban Urban Park should take advantage of its abundant natural features, integrating them with the proposed facilities. Unlike the development of active recreation facilities, which will require the demolition of portions of the park's natural environment, family and social activity facilities can fit well with the natural environment. However, detail analysis on the site is expected before any renovations can be made. The data also suggest that Seremban Urban Park should have programmed activities for family and social groups. Programs such as Kid Days or Family concerts can be held occasionally in the park.

For future research, studies on how family and social groups behave in the park are essential to understand and quantify the park activities in which they engaged. Even though there are many such studies in the West, the findings might be different in Malaysia because of the differences in religions, culture and climate.

#### <u>Microclimate</u>

The research also indicates that participants are more likely to use Seremban Urban Park at certain times and on certain days. Many participants indicated that they prefer to come to the park in the morning, late afternoon, and on weekends. This finding suggests that the design of parks has to consider climatic factors and patron leisure time. In Malaysia, the hot and humid tropical climate is a very important factor for patron use of outdoor spaces. This survey can help planners determine when to program activities in the park. The data suggests that the best time is on weekends or in the late afternoon, because patrons are more likely to be free at these times, and will probably want to relax with family and friends.

# The Lakes as an Important Feature in the Park

The research also indicates that lakes or water areas are important elements in the park. The park's lakes are among its more prominent natural and historical features, as is evidenced by the fact that local people have long referred to the park as Seremban Lake Garden. Research about people's preferences for nature shows that water is the most popular natural element (Kaplan, 1977 & Knopf, 1986). In light of this, it is clear that Seremban's lakes should be used in a way that benefits the patrons, the city, and the park. They should be cleaned, refurbished, and redesigned to attract more people and to enhance their biodiversity. The most pressing problem is the possibility that the lakes may dry up. It is very important that park planners address this problem immediately. If the lakes dry, Seremban Urban Park will lose its most important features, and public perception of the park will further decline.

#### A Need for Maintenance

Research about open spaces and parks has repeatedly shown that maintenance is crucial for any park (Rutledge, 1985; Rutledge and Molnar 1986, Urban Park Online, 2001). For Seremban Urban Park, this need is particularly vital. In the survey, 59.0% of participants cited a lack of park maintenance as a factor in their dislike of the park.

A park maintenance and management program should be incorporated into the proposal for the redevelopment of Seremban Urban Park. This program should be integrated into the earliest phases of the design and planning process. A regular park maintenance schedule must be developed to ensure that the park is always in good shape. The Seremban Municipal Council should make park maintenance their highest priority in managing Seremban Urban Park.

Studies on how to conduct better park maintenance and management should be a top priority for researchers in the landscape management field. They should develop maintenance and management programs that are sustainable, efficient, and affordable. Researchers should conduct cost-benefits analyses to weigh the costs of maintaining parks against the potential financial benefits that cities may reap.

# **Critical Evaluation of Research Methodology**

The research methods for this study were designed to emphasize descriptive findings obtained from survey questionnaires. The intention of this study is to describe the phenomenon that exists in Seremban Urban Park. It is hoped that the research method presented in this thesis can be used as a model for future research on the use of urban open spaces.

When conducting any research, it is important to have a research instrument that is high in reliability and validity. The instrument must be reliable in order to answer all research questions, and it must provide a system to validate the research findings (Checks and Balance system). In this research, a survey questionnaire was used as a research instrument

and its questions function as a tool to ensure the reliability and validity of its findings. In conducting the survey, reliability issues were addressed by ensuring that the questions met the research objectives and could answer the research questions. A pre-test and a series of drafts were conducted prior to the survey to ensure that it was highly reliable. To increase the validity of the findings, the questionnaire used open-ended questions to validate its closed-ended questions. The open-ended questions also acted as a tool to let participants address new ideas that were not identified in the earlier processes.

There are limitations to the survey questionnaire. Often, it fails to provide insight into the beliefs of the participants. Further, it sometimes fails to obtain salient information from them. The participants tend to answer only what they were asked, particularly in the closed-ended questions. However, the survey questionnaire has proven itself to be highly reliable and valid for understanding the use of open spaces, because it can cover a large number of participants, its methods provide great uniformity across measurement and analysis, and it takes a shorter period of time to administer and analyze (Mitra and Lankford, 1999).

# Evaluation of the Research Methodology use in this Research

After completing this study and reviewing the methods, analysis and conclusion, it is clear that there are several improvements that could help refine the research. First, in order to have more accurate results, the study should ensure that the sample population is stratified precisely. For example, several findings could not be conclusively determined because of the unequal distribution of the sample. Enough participants should be surveyed according to the stratified categories. One way to improve the distribution of the sample is by conducting the survey with specific groups in designated places at designated times. Arrangements should be made to ensure that every category has enough participants to ensure that the result is highly reliable, thereby reducing statistical error.

However, if these arrangements cannot be made, a longer period is needed to ensure that enough samples are collected for each category. In addition, a longer survey period could increase the number of participants, lowering sample error calculation. In addition, the research design should enable the responses of participants surveyed in the park to be differentiated from participants surveyed elsewhere, so that more valid and reliable conclusions can be drawn from the data.

Moreover, the survey questionnaires should have more open-ended questions to increase the validity of the findings. For this research, there are five open-ended questions, but only two served as a tool to validate other questions. In addition to providing validation, the open-ended questions may reveal other factors that motivate people to use Seremban Urban Park. The questions used in this research seemed to focus on the validity of factors identified in the literature review and contextual analysis. Very little opportunities was given to identify other factors that may influence the decision to go to Seremban Urban Park. After the research and analysis process, other factors emerged as influences upon this decision. However, as noted earlier, the research method was intended only to validate the original factors, and therefore, the new factors that emerged were difficult to validate with the extant data and analysis. Future research must find ways to make emergent factors valid and reliable, based upon the research.

In summary, this thesis presents a methodology that can be modified and used for future research. Some suggestions to improve the research to provide more information about the use and preferences for urban open spaces are listed above. The application of the research method to other open spaces with the suggested improvements could reveal other factors that influence people's preferences for and use of urban open spaces.

# CONCLUSION

Seremban Urban Park is facing declining use due to its deteriorating condition and lack of maintenance. This dilapidated condition has led to a negative public perception towards the park. Clearly, it needs to be renovated.

Before this renovation can proceed, it is crucial for landscape architects to understand the factors influencing potential park participants, particularly their needs and preferred activities. Understanding these questions is important, not only for fostering greater usage of

Seremban Urban Park, but also for planning the development of other parks in Malaysia. This thesis is a starting point for increasing knowledge of patron behavior, park design and planning, and landscape architecture in Malaysia.

This thesis has identified five factors that influence potential park patrons: accessibility, sense of territoriality, activities provided, natural environment, and park maintenance. Factor analysis has revealed five factors under which participants' needs and preferences may be classified. Means analysis shows that these factors are, in order of preference, Family Activities, Passive Observation and Socializing, Physical Activities, Passive Observation and Contemplation, and Exploration. It is important that designers recognize and plan for these factors before they redesign Seremban Urban Park or any other park in Malaysia.

In addition to these general findings, an in-depth analysis of the survey reveals other highly significant findings, which impact the planning and design of the city of Seremban and the renovation of Seremban Urban Park itself. First, for the planning and urban design of the city of Seremban, it is shows that the urban park has emerged as an important public space in Seremban. Changes in the way of life of Seremban's citizens have transformed public life and the use of traditional public spaces. As public life in the city has shifted to utilize the urban park, Seremban Urban Park has become more important than ever. Second, for the renovation of Seremban Urban Park, an analysis of the survey reveals that landscape architects, planners, and park managers need to rethink their priorities regarding the activities that the park provides. It is important to consider the overall planning of the city before making any decisions about which recreational facilities the park must provide.

For Seremban Urban Park, analysis of the survey suggests that the park should maintain its natural beauty because of its historical and ecological value. In spite of the numerous respondent requests that recreational facilities be built in the park, these facilities should be placed in other parts of the city. Next, it is important to recognize that people prefer to use Seremban Urban Park for family and social gathering. These activities are matched perfectly with the natural environment that is abundant in the park. The findings also suggest microclimatic conditions should be taken into consideration when renovating the parks and

the lakes. The lakes are important because they are historic and people always refer the park as Seremban Lake Garden. They are synonymous with the city of Seremban. Finally, the survey indicates that it is important for park planners and administrators to reconsider their prioritization of park maintenance. The data suggests that the park should develop systematic park maintenance programs to ensure that it remains in consistently good shape.

In addition to these significant findings and their implications for the planning, urban design and the renovation of Seremban Urban Park, this section also evaluates the research methodology used in this research. To refine the research findings, it is suggested that the sample populations should be carefully chosen and obtained. More participants are needed to validate certain findings and to answer certain research questions. In addition, it is also suggested that validity of the findings be increased through the use of more open-ended questions. These questions act as a check and balance system and furthermore, can offer more insight into various phenomena.

There are many other factors related to park use and preference. Further research must explore these factors, consider whether they are relevant, and explore their implications for park and open space design in Malaysia. However, it is important to understand that the factors vary from place to place. The more we understand why people prefer to go to certain places, the more effective we will be as designers, landscape architects, and managers of these places.