

THE FOUNDATION OF URBAN PLANNING IN GEORGE TOWN AND ADELAIDE*

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Artikel ini cuba menjelaskan perbezaan bentuk perbandaran yang ketara antara George Town dan Adelaide. Pengarang menghujahkan bahawa penerokaan George Town tidak dirancang manakala penerokaan Adelaide adalah dirancang. Sebab utama kedua-dua bandar berbeza ialah kerana George Town merupakan sebuah jajahan "plantation", di mana perniagaan bersama orang tempatan diutamakan. Justeru itu, bentuk perbandarannya diketepikan. Sebaliknya Adelaide merupakan sebuah jajahan "settler", dimana orang lebihan British bermastautin. Jadi, pembangunan bandar itu memang terancang. Namun begitu, pengarang juga menerangkan bahawa personaliti ayah dan anak, yang mana seorang ialah pengasas George Town dan seorang yang lain pengasas Adelaide, juga membawa kesan tertentu kepada pembangunan kedua-dua bandar.

The paper attempts to explain the radically different urban forms of George Town and Adelaide. The argument is that while the early settlement of George Town was unplanned, that of Adelaide was. The main reason for such a different treatment of the two settlements was that George Town was to be a "plantation" colony, a place to conduct trade with the locals. The settlement pattern was not a priority. On the other hand Adelaide was to be a "settler" colony where surplus Britishers could be resettled. Thus the growth of the town had to be planned. Nevertheless, the author also points out that the personalities of the father and son, one the founder of George Town, the other Adelaide, had important bearings on the eventual development of the two towns.

INTRODUCTION

This paper is a study of twins, cities rather than babies, in an attempt to shed some light on the role of planners within the larger socio-economic conditions under which they function. Specifically, the objective of the paper is to show the very different foundation of urban planning in George Town and Adelaide. It will argue that this difference is largely explained by the socio-economic demands of colonial society at the time the cities were founded.

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Yet there were also very interesting incidents in the life experiences of the founders of these two cities to lead one to suspect that the personalities of the founders do have a role to play in the eventual development of the cities.

A Tale of Twinned Cities

Those not familiar with George Town and Adelaide will wonder why the comparison these two cities, one in Malaysia and the other in Australia. One reason is that they are twinned since 1973. This in turn suggests that there are other relationships between these cities to warrant a twinning agreement.

The circumstances leading to the twinning of George Town and Adelaide can be traced to the close relationship between Penang and South Australia which developed as a result of meetings in the early 1970s between the Premier of South Australia, Mr. D. A. Dunstan and Dr. Lim Chong Eu, the Chief Minister of Penang. Although meetings between state leaders are common, it is strongly suspected that the role of Adele Koh, the Malaysian-Australian wife of Dunstan, was important in bringing the two men together. As a result of the State to State relationship, it was agreed that the capital cities should be twinned and this was formalised between George Town and Adelaide in December 1973.

The popular justification for the twinning of George Town and Adelaide was that both were founded by the Lights: the former by Francis Light in 1786 and the latter by William Light, Francis' son, half a century later in 1836. Coincidentally, even the names of the cities are also related. George Town was named after King George III of Britain while Adelaide was named after the wife of King William IV, George's grandson. These cities, named after personalities who were three generations apart and founded by father and son, are now seen as 'sisters'.

Although there are now many books and journal articles on the Lights and their roles in the foundings of these two cities, there is as yet little attention in comparing the circumstances surrounding their actions. A comparative study of the individuals and the wider forces at work around them would enable those interested urban planning and urban development of these two cities to better understand the present issues facing the cities and the planners.

Since its founding in 1786, George Town has steadily grown from a nearly deserted corner of Penang island into an important city in Malaysia. In 1980, the population of the city proper of 9.4 square miles was about 250,000. But to most people, the city is bigger than the 9.4 square miles. Suburban development has extended the built environment outside the city limits and metropolitan George Town now covers the suburban areas of Tanjong Bungah,

Tanjong Tokong, Ayer Itam, Jelutong and Glugor. Wee (1985) suggests that George Town's population as of 1980 should be seen as 476,100 taking into account those living in the suburbs of George Town. This makes metropolitan George Town the second biggest city in Malaysia after the capital metropolitan area of Kuala Lumpur-Petaling Jaya. In the near future, it is very likely that metropolitan George Town will stretch to include the holiday resort of Batu Feringghi in the north and the new town of Bayan Baru in the south (Map 1).

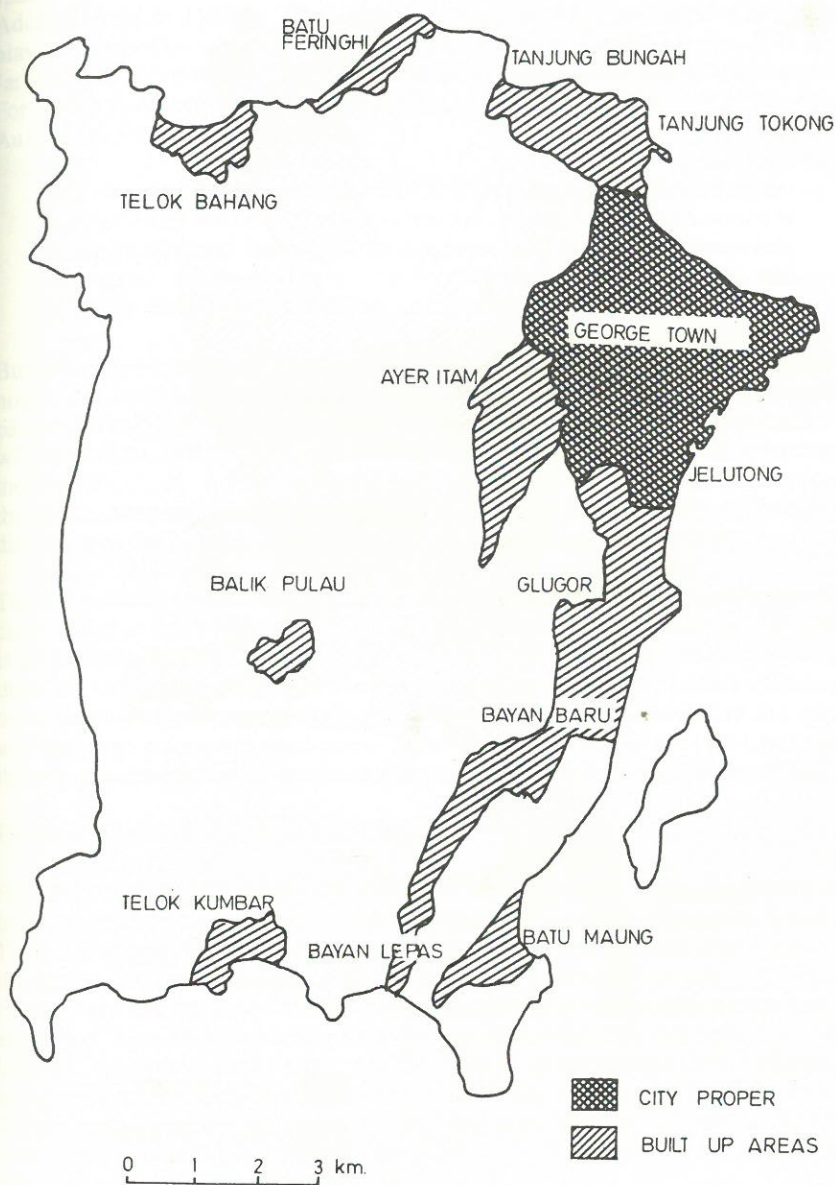
Apart from its growth in size, George Town can boast of many favourable features. These include a very lively and vibrant city centre, the existence of many beautiful and historic buildings and a cosmopolitan image. The city and its suburbs also have some monumental man-made structures: such as the tallest building in Malaysia and possibly the Southeast Asian region, the Keh Lok Si Temple complex and one of the longest bridges in the world.

Having said that, it should also be noted that the spatial structure of George Town lacks a sense of purpose. Except for some small areas, there appears to be no plans to guide the growth of the city. Planning seems to be following development, rather than the other way round. As such, plans are more for correcting the existing problems than to guide impending development or to ensure that present conditions do not deteriorate. While the unplanned growth of George Town has resulted in some unique and interesting areas, such as the narrow and winding To' Aka Lane and the cultural richness of Muntri Street, it has also produced certain conditions which are not welcome. These include floods, traffic congestions, unhealthy sewage disposal method, lack of open space and pockets of insanitary housing, just to mention the more obvious ones. It may be of interest to point out here that despite efforts at urban planning and development control since the beginning of 1930 (Goh, 1984), there are no favourable comments on the urban form of George Town or aspects of urban planning in the city by any authoritative figures.

Following its founding in 1836, the population of the city of Adelaide of 1.6 square miles quickly reached its peak of about 42,000 in 1920. Since then, the population in the city proper has declined to about 15,000 in 1985. But like George Town, it is common to see Adelaide in terms of the city proper and its suburbs. In 1981, metropolitan Adelaide had about 900,000 people covering about 555 square kilometers stretching from the suburban town of Elizabeth in the north, the Port of Adelaide in the north-west and Christies Beach and Reynella in the south (Map 2).

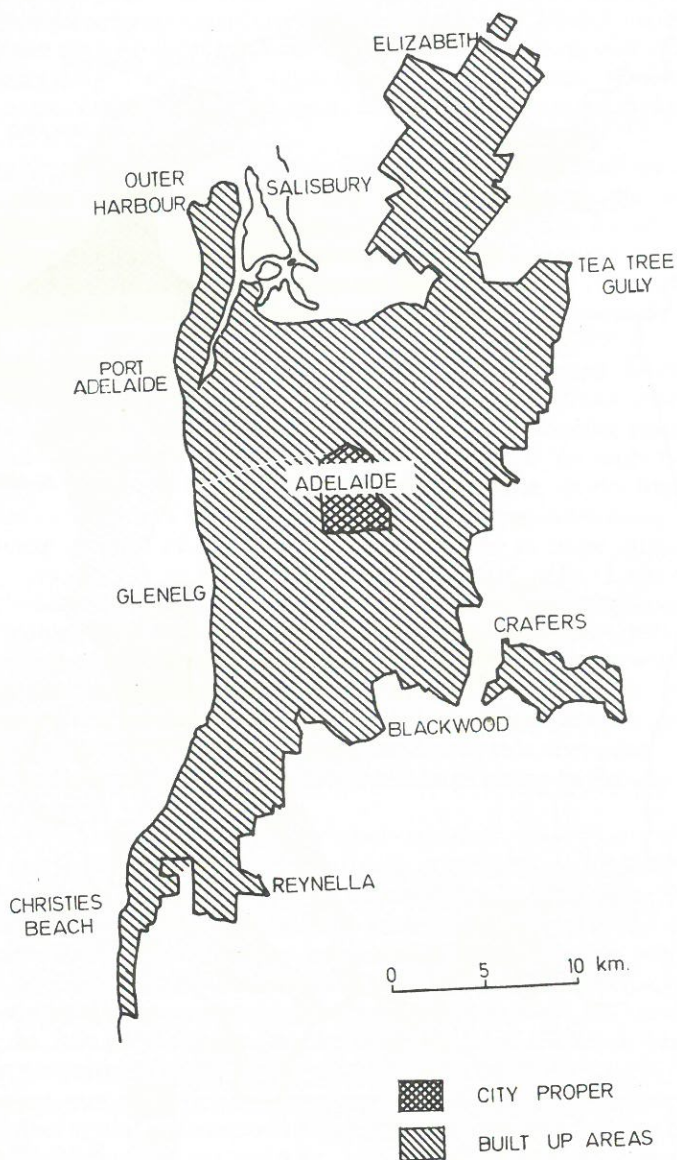
As far as urban spatial structure and urban form are concerned, there are few cities which stand in greater contrast to Georgetown than its sister city of Adelaide. There are now numerous books and articles on Adelaide and the

PENANG ISLAND: GEORGE TOWN AND SUBURBAN AREAS



Map 1 :Penang Island: George Town and Suburban Areas

ADELAIDE AND ITS SUBURBS



Map 2 : Adelaide and its Suburbs

general impression from the writings is that Adelaide is a "modern city without the problems of the 20th century such as crime and pollution", to quote a speaker in a seminar on the benefits of the twinning of George Town and Adelaide held in 1986 in Penang. One may suspect the speaker was slightly biased in his view of the city since he was its Lord Mayor (Mr. Jim Jarvis), but even in the eyes of professional planners, the judgement is good. For instance, according to Alan Hutchings, the Executive Planner of the South Australian Planning Commission,

We see an Adelaide that provides fair and generally pleasant surroundings for its citizens, and that sets a framework with which at least the physical dimensions of equity initiatives can be reasonably expressed. From the point of efficiency however, it could be said that we have almost used up our planning capital (1986:6).

But even to observers who are interested in urban planning, it is difficult not to notice the Park Lands surrounding the city, the wide streets and pedestrian pavements and the various "squares". Visitors from the Third World countries will not fail to realise the relatively smooth traffic flow despite the fact that the University of Adelaide, the South Australian Institute of Technology, the parks, hospital, central shopping area, banking district, casino, "red-light district" and the Town Hall are all within a stone throw from each other.

There are many factors which led to such contrasting development in the two cities and it is not possible to provide an account of all of them here. But there is little doubt that the decisions of both founders and the major forces around them in the initial period of the founding of the cities had lasting effects on the subsequent development of George Town and Adelaide. The rest of the paper will therefore attempt to shed some light on the lives of the two Lights and the wider socio-economic conditions under which they founded the two cities.

Francis Light and William Light

For two men who lived together for only 6 years, their biographical backgrounds are very similar. Francis Light was born an illegitimate child in 1740 in England. The early childhood of Francis is of no significance here. By the age of 19, he joined the British navy and saw naval actions against the French. He left the navy in 1763 and subsequently went to India where he was employed by a Madras trading firm to command one of its trading ships. His trading activities took him to Southeast Asia, particularly Acheen in northern Sumatra, Kuala Kedah in Peninsular Malaysia and Junkceylon (Phuket) in Thailand. It was during his travels in these ports that he "cohabited" (Light's own words in his Will) with one Martina Rosells, a woman whose background was rather mysterious (see Clodd, 1948).

It was also during his trading activities in Kuala Kedah that he came into contact with the Sultan of Kedah and as a result of this relationship, Light became the middleman in the eventual ceding of the island of Penang by the Sultan to the East India Company (EIC) in exchange for a payment of annual rent and the protection of Kedah against attacks by Siam (Thailand). Francis Light was appointed the first Superintendent and responsible for taking possession of the island.

Francis Light landed on Penang island on the 16th of July 1786 and on the 11th of August of the same year formally took possession of the island in the name of the British king and named the island 'Prince of Wales Island'. This name did not stick and few people in Penang know of such a name today. He also named the town at the Northeastern corner of the island 'George Town'.*

In the same year William Light was born, probably in Kuala Kedah. According to Elder (1984), when Francis Light sailed from Kedah to take possession of the island after witnessing the signing of the agreement between the Sultan and the EIC, he took along the three-month-old baby and Martina Rosells. But William did not stay long with his parents. When he was six years old, Francis Light sent him to England to be placed under the charge of his friend so that the boy could be educated there. William never saw his father again for Francis Light died two years later in 1794. He probably also never saw his mother again. After Light's death, Martina Rosells remarried. Nothing is then known of her except that she died in 1822, but as Dutton (196) says, "Light in Sicily would have known nothing of the death of a half-caste woman who had gone native in Penang" (p. 82). By the time of her death, the Light's estates, which were supposed to be held in trust for the children were all sold or lost, no thanks to the executors of Light's will, namely James Scott, Light's "friend" and business partner in Penang and William Fairlie, a businessman in India (see Dutton, 1960:23-24).

By the age of 14, following the footsteps of his father, William joined the Navy. Like his father, William was a midshipman before leaving the navy. In 1805, when he was 19, William too came to India. But unlike Francis, William did not become a trader in Southeast Asia. He returned to Europe and joined the army and saw actions against the French in the Napoleonic wars.

*There is now controversy in whether Light "founded" George Town or Penang. According to some local community leaders, the island was never lost so Light could not have found it. Furthermore, there were already inhabitants on the island so Light could not have founded a settlement. In this paper, the term "found" is not used as a past tense of "find", but as in the establishment of a settlement with a set of laws different from what was in existence in the place.

It was during his journey in Europe that he married one E. Perois, whose background was as mysterious as his mother, Martina Rosells.

Furthermore, like his father, William Light became friendly with another muslim leader, Mohammed Ali, the "founder of modern Egypt" and similarly William was involved in the security problem of another country (Dutton, 1960:21). It was during his days in the Egyptian naval service that Light met one Hindmarsh, who was to become the first Governor of South Australia and who was partly responsible for recommending that Light be appointed the first Surveyor-General of South Australia.

Light was offered the job while still in Egypt. He left England on May 18, 1836 and arrived at the South Australian coast about three and a half months later. He then spent about four and a half months surveying the coast and adjacent land before deciding on the present site of Adelaide on December 7, 1836.* This was one day after the arrival of the Governor of South Australia and the proclamation of the colony and about 60 days after the arrival of the first ship carrying a group of settlers. The official proclamation of the site of Adelaide was on December 31, 1836. This was 50 years after Francis Light founded George Town. William died in 1839, like his father, at the age of 53.

The main concern of this paper is that both founded a city. But the similarities in the life experiences of the Lights were not reflected in their treatment of the new settlements, especially in the crucial areas which have important long-term effects on the proper development of the cities. Three such crucial issues will be discussed here. They are: selection of site, land-use planning and land policy.

Sites of the Cities

When Francis Light founded George Town, there was no consideration at all as to the suitability of the 'penaga point' or the tip of the promontory of the island as a site for the town and therefore the capital of the settlement. Although the choice of site was clearly limited, since the island of about 118 square miles was very hilly and long stretches of the coast were swamp land, alternative sites could be chosen as the embryo of the settlement. Judged from the point of view of days of ships, war and relatively low technology,

*There is a small controversy over Light's role in the siting and design of Adelaide. Johnson and Langmeade (1986), for instance, believe that George Kingston, Light's assistant, should be credited rather than Light. Although Kingston's contribution in the siting of Adelaide has not been as popularly recognised as it should be, there is little doubt that Light is responsible for the decision in the final selection of the site.

the site Francis chose as the place to begin the settlement can only be considered poor. One major problem was the lack of drinking water. Light himself complained that the quality of the water from the well was "indifferent, being stained with the roots of the penaga tree which dyes red" (quoted in Clodd, 1948:50). This problem of shortage of drinking water was not solved until 1805 when the then Lieutenant Governor, Farquhar, constructed an aquaduct to bring water from the waterfalls, about 10 kilometers inland, to the city (Stevens, 1929:398).

Drinking water might have been in short supply, but water as such was not. Except for a very small area, the land Light selected as the site of the town was low-lying and flood-prone, barely above the high water mark. Therefore the problem of flooding was ever present in parts of the town for many years. As Stevens (1929) records, "In the early years of the century, the streets of Georgetown remained a quagmire until Mr. John Brown, assisted by a small group of convicts, ... raised and drain (sic) so that they become tolerably passable in wet weather" (p. 388). That only partially solved the problem. Even today, certain parts of the city are annually covered by flash floods and in certain areas just south of the city centre, flooding of roads occurs almost every month during high tides!

The strongest criticism of the site in the early days was that it was very difficult to defend. Since there was a belief that the French would attack the settlement, it was recommended that the town be shifted to a place at the southern part of the island. Among those who advocated such a move was no less a personality than Col. Wellesley, who was later to become the Duke of Wellington and under whom William Light was to serve in the Napoleonic war. According to Wellesley,

As the fort and town stands (sic) now, it is impossible to defend them. ... the only remedy then is to construct the fortress or other defence in a part of the island where it can be defended, to build it so that it may be a safe depot, and leave it to the good sense and the convenience of the inhabitants, present and future, either to remain where they are now, or to move into the neighbourhood of the new position....

There are many positions upon the island which would answer this purpose, but I shall particularly recommend one to the southward, directly opposite to the small island. There are fine situations for docking ships, and for watering; the channel is difficult and narrow; and if a battery were constructed upon the north-west end of the small island, no ship could enter it (quoted in City Council of George Town, 1966:3).

If Light was not aware of the potential of the site suggested by Wellesley, his friend and business partner, James Scott was quite quick to recognise its potential. Even before Wellesley made the call for a shift, Scott was already amassing the land in this area. Unfortunately for Scott, the proposed shift did not take place and his proposed Jamestown was not built. It was only in early 1970, or about 160 years after Scott's death that the Penang State Government decided to locate the new town of Bayan Baru on the very spot where Jamestown was to be built.

The selection of the site of Adelaide was made after more than 4 months of survey of the southern coast of South Australia. Seen in the days of sailing ships and horse carriages, the decision on a site which was about 9.6 kilometers from the sea was courageous and one which could not be made without much thinking. Even when pressured by important figures, including the Governor that a site closer to the sea such as Port Lincoln be chosen, William Light held fast to his decision. Even a decision to shift the site of the town about 1.6 kilometers closer to the sea so as to be more in line with the inclination of Governor Hindmarsh was quickly reversed when it was found that the new position might be subjected to floods (Elder, 1984:34).

Today there is no lack of praise of Light's decision on the site of Adelaide. For instance, according to Williams (1977),

His choice of a site on the east coast of Gulf St. Vincent was excellent, for it was as central a point in South Australia to the area capable of supporting intensive agricultural production and hence dense population, as could be (p.4).

It is not the intention here to pass judgement from one hundred and fifty to two hundred years down the road on the decision about the site of a town. Very few, even the most forward looking persons, could have imagined the very rapid rate of technological change and urbanization. The point here is not that William Light made a very wise choice while Francis Light made a bad one, but that Adelaide was founded after a careful study and serious thinking while George Town was founded without any such consideration.

Town Planning

In the case of George Town, there is little doubt that Francis Light was not too concerned about the layout of the town, either for the welfare of the residents or for good urban form. Very little was done to prepare a plan before the settlers arrived and were allowed to build on the land. Light did prepare a layout marking out the major streets at the tip of the promontory on the north-east corner of the island. According to Stevens (1929),

The commercial town was paid (sic) out by Light between Light Street, Beach Street (then running close to the seashore), Malabar Street (subsequently called Chulia Street), and Pitt Street.

Within this area the network of roads laid out by Light survive almost without change to the present day, the original names of the streets, with the exception of Malabar Street, being still in use (p. 390).

Clodd (1948) maintains that this rectangular block system of roads was "mapped out with such accuracy that they form the basis for the alignment of the principal thoroughfares as they exist in Georgetown today" (p.117). Walkley (1954) has also complimented Francis Light on his layout design. These writers were rather generous in his praise of Light. In the opinion of the authors of *Penang: Past and Present*, the layout scheme of Light was very rudimentary. Quote:

Having named the island after the Prince of Wales, Light evidently made amends by naming the town after George III, quickly adding names to commemorate and conciliate the Prime Minister, and the Governor-General. The naming was more regular than the layout and the arrival of the settlers prevented any second thoughts on the subject (City Council of George Town, 1966:1).

This lack of concern on the part of Light as to how the town was to develop is also evident in "the ingenious expedient of loading a cannon with a bag of silver dollars and firing it into the virgin forest" to stimulate the clearing of the trees (Clodd, 1948:50). The proper growth of the town was obviously not a major consideration when clearing of the land depended on where the coins had dropped.

The result of this lack of a properly planned settlement could be seen in the living conditions of George Town in late 1790s, about 10 years after the founding of the city. Stevens' (1929) description of the living conditions in the town proper is as follow:

The Tanjong of MacDonald's day was swampy and ill-drained, and, being inhabited by a large mass of Asiatics crowded at close quarters, dirty and insanitary. ... the bad site and conditions of the towns resulted in much sickness and death amongst the lower order, the Chinese particularly. Nor the Europeans escape (sic) ... and the old graveyard supplies appalling testimony to the number of Europeans who died before reaching the age of 30 (p. 386-387).

The scene outside the town proper was just as bad or even worse. In the words of MacDonald, Light's successor as Superintendent of Penang from 1794 to 1800, the settlement outside the town limits was,

...a mixed, a little estimable population, live huddled together in a manner little superior to their favourite animal, the buffalo; every species (sic) of villainy of depravity and of disease here finds an asylum (quoted in City Council of George Town, 1966:2).

Today the layout by Light still remains almost the same as he designed it more than 200 years ago. However, this is more the result of the lack of reserve land for change rather than no need for it. However, the main weakness of Light's original layout is that it has not formed the basis on which subsequent planning could build upon. It has not inspired the city officials to be interested in the urban spatial structure or urban form of George Town. Indeed, urban planning or town planning as we know it today was not practised in the city until 1931 when a rather rudimentary zoning plan for the city was prepared. The first town planner was recruited only in 1956 and only in 1985, on the eve of the bicentenary of the founding of the city that the town planning unit of the Municipal Council was up-graded to the status of a department.

The City of Adelaide, as is so often noted, is among the most intensely planned cities of the world. Despite the eagerness of the settlers to move into the town and begin building their houses, a comprehensive survey of the site was carried out and ten days were spent "in looking repeatedly over the ground, and devising in my own mind the best method of laying out the town according to the course of the river, and the nature of the ground" (Light, 1839:43, quoted in Dutton, 1960:213).

There are now many books and articles praising the great vision of Light as a planner and designer. Even in the very early days of the settlement in Adelaide, the second governor of South Australia, Gawler, a man not known for his liking for Light, was forced to admit that the benefits of Light's work to the colony "are becoming every day more and more apparent" (quoted in Mayo, 1937:190). About 124 years later, the appraisal of Light's plan was even stronger. According to Dutton (1960),

His plan of Adelaide was brilliant, in its site, its sensitive relation to topography and climate, its wide streets and squares and its belt of parklands (p. 214).

Perhaps the master stroke of the plan is the way in which the classical clarity and order of the central city emerges from and is softened by the natural disorder of the surrounding parklands (p. 215).

Beauty is of course in the eyes of the beholder. Despite the general acclaim of William's vision, there were some who do not see much greatness in his plan of Adelaide. But as Elder (1984) puts it, some of the comments are unfair:

... the city remains, bearing out Light's confidence in his work. Of course it has its detractors, both then and since. A common complaint was that Light did not provide enough north/south streets. Another was that he had made no provisions for railways (the first train ran in London in 1836, the first in Adelaide not until twenty years later.) Some even seem to think that he should have anticipated the motor-car and made the streets wider than those that were said at the time to be too wide (p. 51).

Even today when planner-bashing is a favourite past-time, Light's plan for Adelaide is often held up as one of the few examples where planning has succeeded. As O' Carrigan (1987) notes,

In the first instance a city is made special by its bounds, natural limits and man-made extent. The conscious, creative act of delineation is Light's supreme legacy. Adelaide's heritage and urban form is witness to respect for the continuity of that process (p. 21).

Land Policy

The problem of the lack of a plan for George Town was compounded by the total disregard for control of land. Francis Light was very careless in the land matter. As a result he was very lavish in granting land to all who asked for it. The adverse effects of this carefree nature of granting land was already evident in the late 1790s, about 10 years after Light landed to take possession of the virtually unencumbered land. As MacDonald complained during his term as the Superintendent of the island,

Mr. Light, in his eagerness to clear, gave away as much to every claimant as his avidity, or his consciousness of industry, prompted him to demand. Malays, Sepoys, Lascars, all descriptions became seized of Landed Property. The Axe their only title, but without any obligation of improvement, restriction, or even acknowledgement (1797, quoted in Phillips, 1829:4).

MacDonald was rather conservative in his assessment of Francis Light's handling of the land issue. In 1929, Stevens was more harsh in his appraisal of Light's dealing with the land question in the early days of the settlement. According to him,

He was lavish in the permission he accorded to Europeans (including, as the practice then was, the servants of the Company) to appropriate large tracts of the finest land, without reference to their ability to make effective use of them. ... Light himself set a bad example by appropriating several large estates in various parts of the island, in addition to a considerable area of valuable land in the north coast, not far from the Fort. Scott too, as was natural, appropriated large areas; and both Mr Manington and Mr. Caunter possessed themselves of much larger estates than would appear to have been desirable (Stevens, 1929:380).

This generous and carefree manner in granting land has very important implications for the planning and development of the town. Even in the very early days of the foundation of the city, the lack of public land was already felt. For instance, when it was decided to build a Government House in 1800, no land was available. Thus in 1804 or 1805, during the Governorship of Farquhar, the "Government were reduced to leasing a piece of land from Mr. James Scott for the erection of a Government House" (Stevens, 1929:387). Since then, this lack of public land has been one of the main obstacles in the planners' efforts to provide community facilities and amenities, including parks, schools and low-cost housing. Furthermore, the wholesale alienation of land meant that the planners of George Town and Penang do not have within their control a substantial enough amount of land to exert much influence in the land market or to control land development as in the case of Stockholm, Canberra or even Adelaide in the earlier years.

The lack of large-scale public land ownership of land was not the only shortcoming in the legacy left by Light. There was also no proper land survey nor a system of recording the ownership of land. The number of land Grants issued by Light was only 28 (Stevens, 1929:392) mainly because there were no proper survey personnel. Light did issue "Cutting Papers", which were documents giving the holders permission to cut the jungle and "Measurement Papers" which were documents stating the measurements and boundaries of the land cleared. These documents were to be replaced by Grants when a proper survey was carried out (Lee, 1957). However, this was not done until the late 1790s and early 1800s. But by then disputes over the ownership of land were already common. As MacDonald (1796) laments,

Land was a superabundant commodity, considered of little value. To ask was to have; or to appropriate without asking was equivalent to legal right. Hence at present much difficulty in ascertaining the difference between what has been granted originally by Mr. Light, or subsequently purchased, and what has been taken without any permission (quoted in Phillips, 1823:4).

Despite successive attempts to institute a proper land administrative system, the efforts to record the ownership of land in George Town and Penang continued until the mid 1960s when the Torrens system of land administration was introduced. But because of the accumulated problems of about 200 years, the process of conversion from the conveyancing system to the Torrens system has neither been easy nor smooth. Until 1984, almost on the eve of the bicentenary of the founding of the settlement in Penang, for land lots which had not been given titles under the National Land Code of 1966, there was still no guarantee that what was stated on the land registers was one hundred percent correct (see Goh, 1984b).

In the case of Adelaide, the land policy was largely well decided in England, long before William Light landed on the shores of South Australia. Here the land policy was basically the brainchild of one Edward Gibbon Wakefield when he was in jail for abducting an under-aged heiress. Wakefield's idea was that land in the colony should not be granted free, but rather sold at "sufficient price" so that the proceeds could be used to fund the conveyance of surplus British labour to the colony free of cost (Mayo, 1937:62-65). Thus in the case of Adelaide, the land was actually sold in England even before the site was established. This means that the land had to be properly surveyed and apportioned into lots with a proper system of recording the titles before the settlers were allowed to build their houses.

Unlike his father, William Light played no part in either the land policy or the establishment of a land registration system.

The Wider Forces

The comparison between the planning of the foundations of George Town and Adelaide is not to show the wise decisions of the son and the mistakes of the father. There are just too many factors which affected their actions and these are largely outside the control of both the Lights. As Sandercock (1975) puts it,

... the individual is rarely the sole mainspring of history, and to focus on the individuals is to ignore the social forces at work around him (p. 47).

The major forces at work around both Francis Light and William Light when they founded the two cities are briefly discussed below.

Firstly, the towns were founded 50 years apart. In those 50 years between 1786 and 1836, great social and technological changes took place. Important phenomena which had significant implications for the emergence of urban planning taking place at that time were the beginning of the Industrial

Revolution in England and the emergence of radical ideas culminating in important social events like the French Revolution (see Benevolo, 1967).

In England, the industrial cities were beginning to be clogged with migrants from the rural areas. The filth and terrible conditions of unplanned urban living were beginning to show in cities which had no plans to accommodate the large number of people. These were vividly brought out in the writings of the social critics of those days (see Cherry, 1974). Despite the fact that Howard's book on the Garden Cities was not published until 1898 and the Garden Cities and Town Planning Association was not founded until 1899 (see Cherry, 1974), the idea that proper planning was essential for the welfare of the community was already well accepted by those interested in human settlements and the welfare of urban dwellers (Ashworth, 1954; Benevolo, 1967).

Secondly, there was a big difference in the locations of the two cities in relation to densely populated areas. Adelaide was located in a vast open space, remote from any other permanent settlement. There were aborigines living in the area but they had neither the means nor the desire to own land in the Western sense. George Town, however, was located in close proximity to areas of teeming population. On the day of the official proclamation of taking possession of the island, there were already settlers on the island. In Light's own words,

Our inhabitants increase very fast, Choolias, Chinese and Christians. They are already disputing the ground, everyone building as fast as he can (quoted in City Council of Georgetown, 1966:1).

Even if he realised the importance of land use planning* and wanted to plan before the arrival of settlers, there was no way Francis Light could have prevented the settlers from flocking into the island. On the other hand, in Adelaide, it is of interest to note that the arrival of European settlers was tightly controlled and sailing from England to South Australia could take anything from 4 to 6 months. Perhaps more importantly, William Light had full control over where the settlers were to be located. When the first batch of settlers arrived before he could find a suitable site for the new town, Light was able to locate them temporarily at Holdfast Bay (present site of Glenelg). Even then there were only about 200 settlers. Had only about 200 settlers gone to Penang in the first week of the settlement, the EIC might have considered the settlement a failure!

Thirdly and most importantly, the objectives in the founding of the towns were different, although both were commonly seen as colonial cities. George Town was founded as a "plantation colony". Here the main purpose of the town was to act as a trading post and port of call for the lucrative trading activities of the EIC. It was not to be a British settlement in the sense

that the citizens of Britain would be settled here. It was a place from which British traders could conduct trading activities with the native population and a base where the trading activities could be protected against plunder by other European pirate-navy, particularly the French. It should be pointed out that in the 1780s, there was still no intention by the British to colonise the Malay peninsula. The colonialization of the Malay states began in earnest only in the middle of the 19th century. As far as the Directors of the EIC and the British Governor-General in India were concerned, the founding of George Town was only to make money. The spatial structure and the urban form of the town were the least of their concern.

On the other hand, Adelaide was to be a British settler colony where "surplus British labour" could be resettled. As Dutton (1960) says,

South Australia was a base from which to develop a new society. Besides, the subject race here did not even have to be paid a few dollars for the privilege of being elbowed out of their own land. Nevertheless, this was a colony for living in, not simply for making money out of. No troops were needed, no pirates, invading armies or rival territorial claims threatened its existence; Hindmarsh's marines had nothing to do except get drunk. Nor, as in neighbouring New South Wales, were guns and chains and whips needed to make Englishman work for Englishman. If ever a new society should have thrived it was this one (p.196-197).

The settler colony objective explains why William Light was appointed a Surveyor-General and given instructions to undertake a survey before a site was to be selected to be the capital city of the new territory. The instructions given to William Light were specific, at least in the selection of the site of the city. In particular, he was given ten features which the new town of Adelaide should possess. These include:

1. A commodious harbour, safe and accessible at all seasons of the year.
2. A considerable tract of fertile land immediately adjoining.
3. An abundant supply of fresh water.
4. Facilities for internal communication.
5. Facilities for communication with other ports.
6. Distance from the limits of the colony, as a means of avoiding interference from without in the principle of colonization.
7. The neighbourhood of extensive sheep-walks.
8. A supply of building materials, as timber, stone, or brick, earth and lime.
9. Facilities for drainage.
10. Coal.

The instructions also specified that the first seven features listed above were of primary importance while the last three were of secondary value (see Dutton, 1960:162). The fact that William chose to ignore some of the instructions and decided on a site 9.3 kilometers inland because of compensating and more favourable factors is testimony to his great vision. The important point here is that the Commissioners were caring enough to spend time to draft the instructions. The Commissioners also provided some general instructions on the actual town layout. Part of the instructions read,

You will make the streets of ample width, and arrange them with reference to the convenience of the inhabitants and the beauty and salubrity of the town; and you will make the necessary reserves for squares, public walks and quays (quoted in Dutton, 1960:162).

Besides the above, there were also instructions about the surveying and marking of the "country sections" outside the city and the drawing of boundaries for future townships. In addition, William was given the assistance of surveyors and other supporting staffs and time to undertake the job. The fact that the number of surveyors was really not enough to complete the job before the first settler ship arrived off the coast of South Australia was partly the fault of Light himself as he had told the Commissioners that the number of supporting personnel recruited for him was "sufficiently strong" (quoted in Dutton, 1960:157).

In the foundation of George Town, Francis Light was simply given instruction to take possession of the island. There were no directives as to the selection of site or the layout of the town. In fact Francis was even given a free hand in the naming of the settlement. His complement of personnel was made up of 5 staff officers and about 145 fighting men. On board his ship were also European civilians, but there was neither physician nor engineer among them. They did include merchants, a tavernkeeper, ship's carpenter, caulker, cooper, planter, dealer, blacksmith, builder, shopkeeper, beach-marker, mariner and ship builder (City Council of Georgetown, 1966:1).

Comparing his task with those performed in the founding of Adelaide, Francis Light, in his first few years as the Superintendent of Penang, performed the jobs of at least seven important officials, namely the Governor, Resident Commissioner, Surveyor-General, Treasurer, Colonial Secretary, Judge and Advocate-General. To expect him to perform all these roles well is to expect the so called Renaissance man. Furthermore, with no training or experience in any of the professions which could help him to understand the importance of planning and land matters, their significance could not have been paramount in the mind of Francis as he set sail for the island in 1786. It is interesting to note that he was also allowed to earn money as a businessman to

suppliment his income, although the day-to-day running of the business was performed by his "friend" James Scott.

The could-not-care-less attitude of the Directors of the EIC and the Governor-General in India about the welfare of the inhabitants of the new settlement in Penang in the early days is also reflected in their vague reply to Light's pleas for some guidance on the land matters. One such reply reads,

We leave it to your discretion to receive such colonists as you may think it safe and advisable to admit, and to give each family such portion of Land as circumstances will allow, and you may judge expedient (quoted in Phillips, 1823:2).

Walkley (1954) believes that the "freedom of action" given to Francis Light was better than the various restrictions placed on his son. As seen above, too much freedom was also not good, especially in cases where the individual is not well qualified to do the job or inexperienced. Francis Light has been criticised severely for his handling of the land matters in Penang. But a large part of his actions were determined by the larger forces around him, namely mercantilism and capitalism.

The Idiosyncrasies of Individuals

Having explored the "social forces at work" around the founders for the great difference in the foundation of urban planning in the two cities, the paper now turns its attention to an interesting though less tangible factor - the individuals who shaped the events of history.

All books and papers on William Light's siting of Adelaide and his design of the city attribute his intelligence, experience and visions as the main factors guiding his actions and the form of his creation. Very little has been written to show the driving force to achieve greatness, in the face of severe criticisms by his friends and administrative superiors at that time.

But siting a city in itself was not a great achievement. Indeed, it would have been a pale shadow of his father's accomplishment. Francis had to do all the ground work to persuade the Sultan of Kedah, the Directors of the EIC and the Governor-General of India about the importance and benefits of a British colony in Penang. The title of the founder of Adelaide was given to William on a platter without his even asking for it. After all, even if he had shot a cannon ball while his ship, the *Rapid*, was tossing somewhere in the Spencer Gulf or the Gulf of St. Vincent and then pointed to the spot where the cannon ball had landed as the site of Adelaide, he would still be credited as the founder of the city. If somehow the city grew up to be rather interesting, some biographers could, in some convoluted ways, say that this was an act of greatness or

ingenuity, as in the case of his father firing coins in the jungle to encourage the clearing of the trees.

If just founding Adelaide is greatness, it would have been a case of what Shakespeare calls "greatness being thrust upon him". He felt compelled to achieve greatness, even in the face of incurring the displeasure of no less a personage than the Governor of South Australia and those important personalities back in England sitting as the Commissioners of the South Australian colony. To do that he had to find a site and design a city which would stand as a testimony of his greatness. And he was so sure of his success that he only wanted to be known as "Founder of Adelaide" and left it to "posterity ... to decide whether I am entitled to praise or to blame" (Dutton, 1960:288). What brought about this striving for recognition?

Part of the explanations can be found in his childhood experiences. Being sent away at the age of 6 after barely recovered from either small pox or chicken pox (see Clodd, 1948:123) to a distant strange land and placed under the care of strangers can be difficult, even to the bravest. Even if this was a common practice of colonial administrators to ensure a good education for the children, it did not make the experience any less painful.

Furthermore, the journey took William from Penang to China then to St. Helena and finally England only after nine months of sea journey, part of which was through waters where the French Navy would attempt to destroy any ships flying the Union Jacks. William Light, it should also be remembered, spent the first 6 years of his life under the Pinang trees and if not under the care of his mother, "a half-caste of Portuguese descent", was certainly under a native amah. Life in an English country-side with the gentry Doughtys could not have been more different to his Penang life-style.

When he had a choice at the rather young age of 14, he chose the sea as his turf. Was he choosing to follow the footsteps of his father or seeking the only possible means to go back to the place of his early childhood where his mother still lived? There is no doubt that he had not forgotten Penang and the fact that his father was a Superintendent there. In fact, he even believed that he was the rightful 'heir to the throne of the island'. He felt that the EIC usurped his rights when it took over the possession of the island. As Dutton (1960) says,

Whatever later historians may think of the matter, William Light seems to have believed that Penang had been given to his father as a present by the King of Kedah (p. 78)

He therefore believed that the EIC owed him compensations for taking over the island after his father died. Light did take the trouble to write to a close

friend to ask whether he should sue the EIC for usurping his rights to Penang island.

Dutton (1960) believes that William Light was affected by his mother's half-caste descent and her neglect. His two marriages appeared to be unsuccessful. According to the biographer,

It is easy to detect the under-current of under-confidence in his life, perhaps the deepest being of his Eurasian blood, and a woman's love, like a gallant action, could always sweep him over them. It is sad that not until the end of his life did he have any enduring luck with a woman (Dutton, 1960:80-81).

William Light did show desire to return to Penang. According to Elder (1984), there is "a record in the Minutes of the East India company for 20th April 1804 that Mr. Light be permitted to return to Prince of Wales Island, the place of his nativity" (p. 10). William Light did reach India where he witnessed his sister's wedding ceremony. Whether he actually went to Penang is not known. But as Dutton (1960) says,

When he went to India, and how long he stayed there, is uncertain. Surely, having got as far as Calcutta, he would have gone on to Penang, perhaps as crew in a 'country ships', but he may well have been thoroughly disappointed with what he found there (p. 39).

Whether William Light visited Penang is not very important. For reasons to be given later, it is probable that he knew something of his father's legacy in Penang. Unfortunately most of his papers, paintings and diaries were lost in a fire just before his death. But being an artist and adventurer and the fact that he believed that he had a rightful claim on the island suggest that there was a high probability that he was interested in the progress of Penang. If it was so, he would have known that the settlement was not anywhere near "a garden" as Elder (1984:7) puts it, or what his artist's eyes had seen in Europe and the Mediterranean region. But it was rather an over-crowded filthy mass of buildings and people.

Furthermore, in his years in the Iberian Peninsular, Light met and became quite close to the Duke of Wellington. Wellington, then known as Colonel Wellesley, did visit Penang and was rather critical of Francis Light's choice of site for the town as noted island might have taken place.*

*Clodd (1948:60-61) states that William Light became the ADC to Wellington. This is probably a mistake. Light did become an ADC, but it was to General Le Marchant.

Therefore the offer out of the blue to be the founder of a city rekindled memories of whatever he was told of his father and Penang. He could not refuse the opportunity although he was already 50 years old and of ill health. As stated in Elder (1984),

Before he left England for South Australia, Light told his friend George Palmer that the main reason he wanted to go there was to follow his father in founding a colony (p.4)

The zeal and commitment with which he undertook his job was tremendous, even if he made enemies in the process. It is possible that he was a perfectionist. It is also possible that he wanted to make sure that the mistakes of his father were not repeated. It is nice to think that there is a possibility, though rather remote, that the mistakes done in George Town and Penang in general were somehow of benefit to the planning and development of Adelaide.

CONCLUSION

Recent writings have tended to suggest that urban planning is basically a capitalist process to ensure the reproduction of the capitalist social relations of production. As such, urban planners, being servants of the state, are more or less willing prisoners of the system. In the planning of George Town and Adelaide, the long arms of mercantilism and capitalism can be seen. Georgetown was established as a base to make money and therefore how it developed, at least in the initial period, was of no importance to the decision-makers in India, so long as it served the interest of the EIC. Adelaide was established as a settler colony - a town to be occupied by "the middle class business and the professions" and emigrants who "would call themselves ladies and gentlemen" (see Dutton, 1960:148). The capitalist accumulation process would come only after enough settlers have been attracted to the "barren" South Australia. These contrasting objectives of colonialization constitute the single most important factor governing the differing foundations of urban planning in George Town and Adelaide.

But having said the above, there is also no denying that the idiosyncrasies of the men who were instrumental in the founding and the design of the cities are important. While they are often constrained by the demands of the socio-economic system, as both the Lights were, their idiosyncrasies might reinforce or ameliorate the more vulgar manifestations of the system.

William Light left it to posterity to judge him and his work and more often than not the judgement has been very favourable. Although he died a financially poor man, his name has been often spoken of in relation to good urban

planning. But he should have known this, for about 45 years earlier, his father already said it in his last undated letter to Doughty, the guardian of young William.

History shows no Examples of the first Adventurers making fortunes, it is sufficient that hereafter they are spoke (sic) of (Light, undated; quoted in Clodd, 1948:135).

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