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'BUILDING A NEW TO PRESERVE AND VENERATE THE PAST, THE CITIES OF ANURADHAPURA AND POLONNARUWA'

The Case Study presented is of two Cities, in their time, Capital Cities of Sri Lanka, which have been in ruin for seven centuries and abandoned to forest. The restoration of the Infrastructure of Reservoirs and the Irrigation System and with it the re-establishment of the Social, Economic and Cultural base breaths a new life to the two Old Cities.



*Anuradhapura Pond near
Ruwanwelisaya Complex*

BACKGROUND

Sri Lanka is an Island of a little over 28,000 square miles. The present population is near 16 Million of which 74% are Sinhala and 69% are Buddhist.

The history and the development of Theravada Buddhism in Sri Lanka and the history of Anuradhapura and Polonnaruwa run parallel and are complimentary to each other. This is the Cultural Heritage of Sri Lanka.

On the death of Gauthama Buddha in Magada, on the Gangetic plains in North-Eastern India, two Buddhist Missions left India. One came South across the Bay of Bengal to Anuradhapura Sri Lanka (3rd Century B.C.) and to Burma, Siam, Cambodia, Malaysia and Java. The other went North through Gandhara, Afghanistan and Central Asia through Tibet and Sinking to Zian in China and from there to Korea and Japan. (1). The First mission is the Theravada tradition and the Second the Mahayana tradition.

The Mahayana tradition came to Sri Lanka later. The prevailing influence is however the Theravada tradition.

Before the introduction of Buddhism in the 3rd Century B.C., there were, according to scholars, two streams of migration into Sri Lanka from Eastern and Western India. There were, therefore, prior to the Buddhist era two "Prakrit" dialects spoken in Sri Lanka. (2). Irrigated Agriculture was already practiced. Tanks (Man made lakes) and irrigation channels were in existence.

With the introduction of Buddhism, monasteries were built around the city with massive Thupas (Dagobas) and simple living accommodation for the Priests (Sanga). These Thupas rise above the landscape to a height of 100 to 120 meters.

1. The already developed economic base of irrigated agriculture.
2. A new religion accepted by the Sovereign and the people.
3. And the language Sinhala, born out of the two Prakrits already in the island and the other sophisticated Prakrit in which Buddhism was preached, fueled the Sinhalese into endeavours that produced the planning. Engineering, Architecture and the sculpture in stone, there still, to be seen and enjoyed.

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From the introduction of Buddhism in the 3rd Century B.C., Anuradhapura developed as the seat of Sinhala Buddhist Civilisation for 14 centuries (3rd Century B.C. to 12th Century A.C.) This period was of course interrupted by conquests from Malabar, Chola and Pandya in South India for short periods of time. The cultural development, however, remained predominantly Sinhala Buddhist.

Dagobas (Thupas) with monasteries around them were built by the successive Kings. These monasteries became the places where the Art and Architecture of the people were given full expression.

Authorities on Indian and Sri Lanka Art Sculpture and Architecture agree that the Sri Lanka development is Unique and is of the Sri Lankan genius. (3).

ANURADHAPURA, THE CITY WITH A CULTURE

The ancient city of Anuradhapura spreads over an area of 15 square miles. The culture of Anuradhapura is referred to as Apollonian; (4) meaning that the emphasis is on the restraint and orderliness in behaviour; avoidance of emotional excess and display. The emphasis is on group endeavour rather than individual inertia. Those who are under the influence of the apollonian ideal emphasise the middle-path way of life and avoid all extremes of sense-behaviour.

The Architectural and Sculptural forms were pure and devoid of excessive detail and ornamentation as seen in the moulded plinths of buildings and the form of granite pillars and their capitals.

A distinctive feature in most Anuradhapura and Polonnaruwa Shrines is the semicircular "Moon Stone" at the start of a flight of steps to almost all the shrines. Some of them are not so ornate, but many are carved with the traditional motifs.

These are, a central half lotus in full bloom, a neat floral band, then a row of geese carrying lotus stems in their

beaks, then another floral band. Then a band of animals, the Elephant, the Horse, the Lion and the Bull repeated in that sequence. The height of all the animal forms are the same. In the outer most band is the lotus motif once again.

Also of interest are the guard stones on either side of the flight of steps.

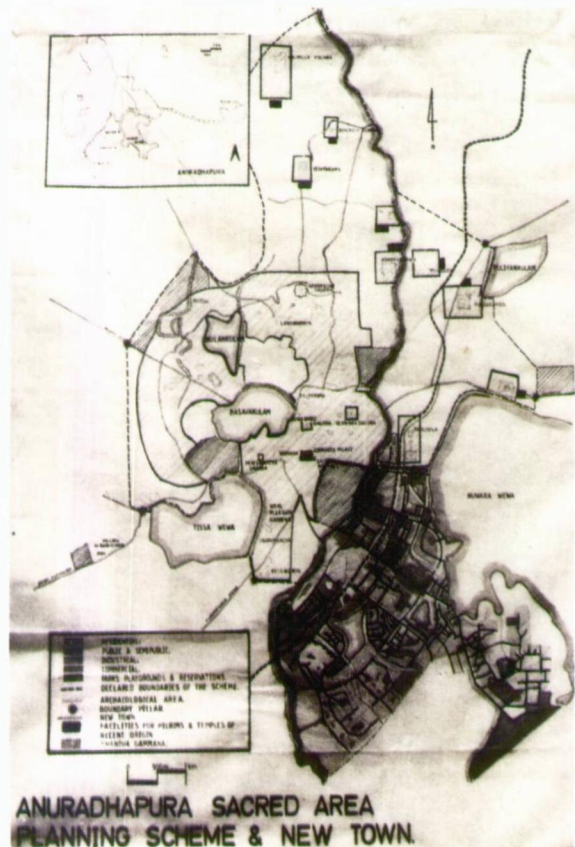
They depict warrior like figures in an arched recess. A many hooded cobra forms a background for the head. The risers to the steps are carved with recessed mouldings punctuated with dwarfs in the middle and the two ends.

When the kingdom was shifted from Polonnaruwa to Dambadeniya in 1235, both Anuradhapura and Polonnaruwa went into ruins. Over the six centuries that passed, jungle grew over the ruins. Malaria added to the woes.

From 1850 to 1950 over a period of 100 years, Anuradhapura gradually came back to life. Its geographic location was such that it was the centre, through which the Colombo - Jaffna Road and Railway ran.

From it, roads ran to Puttalam, Kurunegala, Kandy, Polonnaruwa, Batticaloa and Trincomalee.

The restoration of the Tanks (Reservoirs) brought back into cultivation the ancient irrigated agricultural lands. Malaria controls were initiated and the resurgent Anuradhapura grew among the ruins of the ancient city. Soon the Government Agent's Residence and Offices, the Market, the Prison, the Irrigation



Anuradhapura Sacred Area Planning Scheme & New Town

Offices, the Health Department, Offices, Schools, Churches, Convents, Hotels, Eating Houses and the supporting commercial infrastructure of the Bazaar, all grew around the most revered ancient Buddhist Shrines, the Sri Maha Bodhi (5) the sacred Bo Tree and other monuments, that formed the centre of the ancient city.

PLANNING THE NEW TOWN

In 1949 the work on the New Town of Anuradhapura was inaugurated. The Town Plan envisaged removing all secular activities that congested the Old City to the New Town planned outside it, thus leaving the Sacred City a protected area.

The New Town planned in the hinterland encouraged and accelerated building activity and Anuradhapura blossomed out in the next three decades to the full grown robust and economically flourishing Town it is today.

The Sacred city cleared of the sprawling secular buildings and nestling in its forested landscape is

now the restful place the town plan intended it to be. Pilgrims and tourists now visit the old city, pay homage, and admire the ruins lying in tranquility.

The Anuradhapura (Historic City) Preservation Board was established by Legislation in 1961 and operated from Anuradhapura itself.

Currently in (1986), the Preservation Board has been suspended and a Revised "Anuradhapura Sacred Area Planning Scheme" has been drawn up by the Dept. of Town & Country Planning in consultation with the Dept. of Archaeology and the Central Cultural Fund.

Under the Anuradhapura Sacred City Planning Scheme, enacted into law in 1986, the following actions will be taken –

- (a) Defining the boundaries of each of the monuments and controlling strictly, the character, the scale and appearance of structures needed for pilgrim worship within these boundaries.
- (b) Providing space outside these boundaries for a modern Vihara, under strict planning and design control. This will adjoin one of the boundaries of the monument sites. The purpose is to protect the monument and to revive religious festival activity connected with each monument which it is hoped will bring life back to them and the whole complex.
- (c) There will be two circular roads for viewing the ancient monuments
 - i. The inner circular road will go around the five monasteries immediately outside the citadel, namely Maha Vihara, Jethavana Vihara, Abhayagiriya, Mirisavetiya and the Dakkina Tupa.
 - ii. The outer circular road will go around the forest monasteries.
- (d) Five areas are to be developed with facilities for Pilgrims, such as Dormitory accommodation, Dining halls and the support services needed to maintain them.
- (e) A clear definition of the boundaries of the Sacred Area

Planning Scheme, and the construction of boundary markers at the appropriate positions on main roads.

POLONNARUWA

During the early period of the Anuradhapura Kingdom, Polonnaruwa was an out post, where a garrison was stationed. It was of strategic importance as the road to Ruhuna, the Southern part of Sri Lanka, was at Polonnaruwa after fording the Mahaweli Ganga. It was also a regret from the capital for the Anuradhapura rulers. Polonnaruwa was built over six centuries 602 A.C. to about 1200 A.C. This period was troubled by invasions and political instability.

Much of the development now to be seen at Polonnaruwa took place over a period of not more than one century. This includes the massive irrigation projects as well as the Palace and attendant administrative and Religious structures including the well planned buddhist monasteries. The vast complex of the Alahana Piriwena is a good example.

"The ancient city of Polonnaruwa covers an area of about 122 hectare. The area partially excavated at present extends up to a distance of 5 km North to South and 3 km from East to West. Within this excavated area lies the old fortified city or citadel of Polonnaruwa oblong in shape covering an area of about 25 acres (10 hectare) surrounded by a brick rampart, the length of which is 960 m to the north, 1600 m to the East. There were apparently four gateways to the Citadel but they were not set at the Cardinal points, perhaps, due to topographical reasons. The streets ran North-South but were not aligned in straight lines."(6)

The great man made lake Parakrama Samudra covers an area of 6250 acres (2,500 hectare) and has a capacity of 109,000 acre feet (134.5 million cubic meters). This lake abuts the Citadel on the Southern boundary (7).

The monuments of Polonnaruwa are mostly of Brick construction while those at Anuradhapura are mainly of stone. As at Anuradhapura the

restoration of the reservoirs and the irrigation system at Polonnaruwa, and neighbouring Minneriya and Giritale and also the control of Malaria brought back to life the abandon fertile plains fed by the waters of these reservoirs and with it the resurgent prosperity.

At the end of the last was around 1945 Polonnaruwa had no permanent administration buildings, hospital or schools. Even the Government Agents office was in a cadjan shed. The new Town adjoins the old and extends 5 km to the South of the ruined city bordering the Parakrama Samudra. The trunk road and the railway line to Batticaloa, on the East Coast, runs to the East of the New Town.

Unlike at Anuradhapura where the unplanned growth during the early part of this century clustered round the most important monuments, at Polonnaruwa, the growth occurred by the railway station and the trunk road bordering it about 2 1/2 miles away from both the ancient city and the planned New Town.

Another notable difference in the nature of the revival of these Towns is, that at Anuradhapura the revival was accompanied by a spontaneous re-awakening of religious interest in the monuments, whereas, at Polonnaruwa the interest remained mainly Archaeological. Anuradhapura is visited by pilgrims throughout the year and is flooded by pilgrims in June Posa Full Moon, the day on which Buddhism was introduced to Sri Lanka. Polonnaruwa has no such day or period of religious significance.

Many pilgrims from other parts of Sri Lanka visit Polonnaruwa at the same time they visit Anuradhapura. Their interest at Polonnaruwa is more in the Architecture, Sculpture and Archaeology than Religion.

A common feature in the Architecture and the Planning concepts of both ancient Anuradhapura and Polonnaruwa is the emphasis laid on topography than on symmetry in the layouts. They made capital use of the undulation of the landscape. The same genius for exploiting topographical and geological features are seen in the following examples.

Anuradhapura

- (1) The Royal pleasure gardens
- (2) The Isurumuniya Rock and Temple



Polonnaruwa Ancient City And New Town

Polonnaruwa

- (1) The Buddha Statues at Gal Vihara
- (2) Statue of Parakramabahu

Another interesting feature in the planning at both Anuradhapura and Polonnaruwa, more so at Anuradhapura, are the profession of baths of various sizes and shapes and their elaboration of design.

Some are elaborately planned baths where the pleasure of sporting in water in the warm climate was exploited to the fullest. The larger ones, however, by their size and depths are indicative of a second purpose and, perhaps, the more important of the two, the storage of water, for a draught period.

Example – Anuradhapura

- 1. The bathing pond at the Mahavihara
- 2. The twin ponds

One thing in Common, to the two Ancient Cities and the two New Towns,

is their economic base, the Reservoir fed irrigation System that sustains the agricultural economy. Both Towns are in the same geographical region. This region has one monsoon season, the North-East during the months of December, January and February. The man made lakes collect the rain water during this monsoon and irrigate the fields during the rest of the year.

There are times when the monsoon fails. The lake fed irrigation system takes this into account and there was, and still is with conservation

and water management, sufficient capacity in these lakes to tide over a draught year, with difficulty too.

We have in both these situations, Anuradhapura 300 B.C. to 600 A.C., and Polonnaruwa 600 to 1200 A.C., remarkable Architectural Sculptural and Planning achievements. These cannot however be restored to modern use.

The infrastructure of the economic base however of the two cities ancient and modern, are the same in both situations. The man made lakes and channel fed irrigation system, 75% of which is the restored ancient system.

The present population of Anuradhapura is about 38,000. The New Town was inaugurated in 1950. The increase in population from 1953 to 1963 was 60%.

The present population of Polonnaruwa is about 12,000. Between 1963 and 1971 (eight years) the population increase was nearly 64%.

The renewal and development of Traditional Areas. However deals with the Restoration of the Old Infrastructure and the integration of the New Towns to the old through this one continuing link, the infrastructure of man made lakes and irrigation channel systems.

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1. Hindustan Times Buddha Jayanthi Issue – May 24, 1956.
2. Martin Wickremasinghe Sinhala Language & Culture – Chap. 1 Pages 5 & 6
3. Martin Wickremasinghe in Aspects of Sinhala Culture quotes Eric Newton from his European Painting and Sculpture “behind every oriental statue is the implication of a mood. The idea of serenity has never been quite so intensely caught and held by any European Sculptor as it has been by countless of the cross legged Buddhas of Sri Lanka.”
4. Martin Wickremasinghe quoting Ruth Benedict in her assessment of the culture of the Pueblos of new Mexico and drawing a parallel with Sinhala Culture in “Aspects of Sinhala Culture”.
5. The Sri Maha Bodhi is in all probability the oldest historical tree in the world planted 288 years before christ. Ceylon by Sir James Emmerson Tennent Vol. II Part X. Chap. II.
6. H. T. Basnayake Buddhist Monasteries of Polonnaruwa.
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Editors Note:

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