The Effect of Water Bodies as a Determinant Force in Generating Urban Form.

A Study on Creating a Symbiosis between the two with a case study of the Beira Lake, City of Colombo.

K. Pradeep S. S. Fernando.

139404R

Degree of Masters in Urban Design

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- WITH A STUDY ON CREATING A SYMBIOSIS BETWEEN THE TWO WITH A CASE STUDY OF THE BEIRA LAKE, CITY OF COLOMBO.

Water bodies present in Urban Contexts has been a primary determinant force in the urban formation and settlement patterns. With the evolutionary patterns governing the cities, the presence of water bodies has been a primary generator bias, thus being a primary contributor to the character of the city and the urban morphology.

Urban form can be perceived as the pattern in which the city is formed where the street patterns and nodes are created, and the 03 dimensional built forms, which holistically forms the urban landscape. The perception of urban form has also been a key factor in the human response to the built massing, and fabric whereby the activity pattern is derived, with the sociological implications.

DECLARATION

I declare that this my own work and this dissertation does not incorporate without acknowledgment any material previously submitted for a Degree or Diploma in any University or any Institute of Higher Learning and to the best of my knowledge and belief it does not contain any materials previously published or written by another person except where acknowledgement is made in the text.

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ABSTRACT

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The formation and regeneration of urban form is often a result of the response for the natural geophysical features that are present in an urban context, the subculture of the region, human behavioral patterns and their response. Nevertheless there are primary forces and secondary forces that becomes a resultant of regenerating urban forms in different parameters. In an era of rapid globalization and urban sprawl the need for sustainable urban form has been a widely spoken phenomenon in the last few decades. Regenerating cities in a meticulously planned manner; hence has been of prime importance which otherwise has resulted in many negative implications such as unsightly, polluted and unlivable cities in various parts of the world.

Water bodies and water features that are present in urban contexts has played a significant role in the formation of urban forms which has become the part and parcel of the urban fabric and the morphological patterns.

In regenerating urban form, the response to the natural elements, and the context has been a key feature in forming sustainable urban forms. Which has resulted in habitable, aesthetically appealing and environmentally friendly cities that has formed as functional cities. Such cities also become people friendly cities, with a sense of place and identity.

The human perception on urban forms and built fabric also has been another important dimension in the regeneration of sustainable urban forms and cities.

The core relationship between water bodies and urban forms results in a symbiosis; where if the two are responsive to each other collectively they will result in positive implications in the city. Where the livability the habitability and the urban aesthetics etc. will be enhanced in a significant manner. Hence the two components in an urban context the Urban form and the Water Body will form a Symbiosis where the two will have to co-exist in harmony and the latter will have to be responsive to the former, where the resultant will have positive implications on the city which inevitably will make it livable and sustainable. A water body in an urban context is a *static variable* where the urban forms that are generated around the body are a *dynamic variable* unless the water body changes its form. It is also a hydrological urban space.

The study intends to carry out a literature survey of the water bodies and urban form in the European context and the Asian (local) context; where the water itself has played a pivotal role, in the formation of urban settlements. Thereby to develop a set of matrixes to assess the main water body; and its resultant urban form taken in for the case study.

This dissertation intends to carry out a study of the Beira lake Colombo, where the generation of urban form around the water body as a resultant, due to the functional and aesthetic aspects will be assessed where the final objective will be to investigate the merits the city would harness by creating responsive urban forms in relation to the water bodies, and also the non-responsive urban form can be a resultant of many other negative implication into the city.

Key words: Urban Form, Water Bodies, Symbiosis, Built Fabric, Urban Fabric, Urban street scape, built massing, Urban Built Landscape.

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