ARCHITECTURAL POLLUTION AND ITS IMPACT ON CITY CHARACTER

A DISSERTATION

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE OF THE UNIVERSITY OF MORATUWA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURE

LIBRARY UNIVERSITY OF MORATUWA, SRI LANKA, MORATUWA

By

B.A. Widanagamage

2004
DECLARATION

I declare that this dissertation represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this university or to any other institution for a degree, diploma or other qualification.

B.A. Widanagamage
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ABSTRACT

Nature has an order. Art is derived from nature. It too has an order. Architecture as the mother of all arts has an order. Environment pollution occurs when there is disorder in nature. Noise pollution takes place when there is disorder in music. Architectural pollution like wise takes place due to disorder in architecture. Architectural order depends on quality of the architectural composition. Architectural principles of Number, Punctuation and Infection introduced by Tryston A. Edward (1926) play an important role in achieving the order in visual environment. Because of the formality prevailing in principles the term formal element is used. Likewise disorder in architecture prevails when the architectural objects does not performs it role what is meant by this are, how it response to the context, how the circulation pattern function and the mood of expressions. Based on the changing facts in this activity process it is named as subjectival element.

By violating Formal and Subjectival elements in an architectural product disorder will be brought. Consequent result is architectural pollution. Hence the two causal factors that lead for architectural pollution can be identified as Formal and Subjectival elements. One intention of this study was to identify these two elements with object in mind Kurunegala city from Sri Lankan context would be selected for an analytical study. Applying the two factors, described earlier an analysis will be made in the city of Kurunegala to find out as to what extent degree the architectural pollution has taken place and its impact on city character.
"Achieving harmony in either, is to forge a pattern, and other amidst chaos and disorder. Harmony is brought by achieving order without eliminating those, that do not fit in, by forging strong patterns; to strengthen the gestalt in the ESSENCE, while acknowledging dissent, in the DETAIL. Essence is the FORM, Detail is the SHAPE".

Nammuni 1993
Architecture is the most sublime form of art when compared with numerous art forms. In fact, architecture is the art and science of creating built environment. Built environment can be defined as physical surrounding and condition affecting people psychologically and physically. Therefore architecture by shaping the built environment also simulates the mind of the people.

Art of architecture can be defined as a matter of composing solids and voids in order to have a harmonized composition of spaces and forms while maintaining its uniqueness and character.

Walter Gropius (Park, 1984:86) has paraphrased architecture as the crystalline expression of the noblest of mass, its character, its creed and its religion. Nature has an order. Art is derived from nature. It too has an order. Architecture as the mother of all arts has an order.

In fact for the useful and peaceful result, any activity in the universe should conform to an order. When there is no order, it is disorder. Disorder always leads to pollution. Pollution or the disorder in nature or environment means that the environment is polluted. Disorder in music or sound is noise pollution. Similarly disorder in architecture is term as architectural pollution.

The Oxford dictionary says that pollution is a source of impure, harmful and unhealthy to the people. Hence to ensure a healthy and orderly society and environment, the society should be aware of pollution and work to eliminate it.

The word pollution generally means the absence of sanctity or purity. Similarly architecture is polluted once it is not in accordance with the composition in relation to the neighbouring buildings. In other words it can be defined as incompleteness of pattern in visual environment where the building is located. If the built environment is properly designed and composed it will create a pleasant, harmonized, habitable environment and also create a visual environment, which is full of visual sensation. But it is misdirected when designing it may create an unpleasant, disharmonies and inhabitable environment, which in other words may be called a polluted, built environment. Therefore pollution in
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Introduction

... Cities are among the most enduring and remarkable of all human artefacts. Amalgams of the living and the built, cities are repositories of cultural meaning. Behind the arbitrary twist of a lane or the splendid eccentricity of a new skyscraper on the skyline lies a history of previous urban tenure, a heritage of long-established social conventions, a string of often bitter compromises between individual rights and the public will....

(Kostof, 1996:1)

Living in city would give rise to a feeling of pleasure, however commonplace the sight may be. Like piece of architecture, the city is a construction of space, but one of vast scale, a thing perceived only in the course of long spans of time. City design is therefore a temporal art, but it can rarely use the controlled and limited sequences of other temporal arts like music. It has order this overall order of the city form is achieved from its composition. These harmonize composition of solids and voids are maintaining the character or the uniqueness of the city.

Character in a very simple sense can be defined as the special quality of an entity which gives it identity; its uniqueness. This character is maintaining by its composition it has its own collective peculiarities, sort and style which contribute to its uniqueness. But if any case of disorder its uniqueness will lost.

"This character is often so strong that, it in fact, determines the basic properties of the environmental images of most people present, making them feel that they experience and belong to the same place."

(Schultz 1971:72)

Therefore maintaining the character of a place is of vital importance when the character is altered, destroyed or removed from a place, the essential bond between the place and its
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Introduction

0.1 The Need of the Study

Built environment is the physical surrounding and condition affecting to people psychologically and physically. Built environment consist of tangible physical elements in the form of solids and voids. This has direct relationship to visual environment. Visual environment is intangible it contain of variety and visual sensation. Built environment can be called a visual manifestation of man him self and as an individual as well as a communal being.

Therefore buildings are vitally important and if the composition of their elements and the technology are incorrectly, insensitively and inappropriately used it may give rise to pollution in the visual environment, creating a misfit in the built environment for the living being. Therefore inappropriate and insensitive use of composition in built environment polluted the harmony, rhythm, variety and visual sensation of the visual environment. Lack of variety, rhythm, harmony and visual sensation may contribute in diminishing the character, uniqueness and the identity of the city.

Today it can recognise that certainly there is no order or balance between what it have inherited and what it built. Everything is changing around and building shells and net works eliminate the lost balance and order that existed once. One person or a group of persons built settlements in the past for a particular purpose and they were generally planned ones, where the functional spaces were coherently bound with each other. As these grew larger, control over buildings in an urban environment became less and individuals took decisions on what and how to build, mostly to achieve personal glory. The relationship of parts of an urban environment to each other and to the
whole broke down, thereby causing a lack of order and identity in the entire urban environment.

City forms are in a continuous state of flux a continuous process of growth and change. Although these changes are valid and needed, the individualistic approaches in designing with no regard for the city as collective composed product, have resulted in disorder developments in creating polluted inhuman environments, while destroying the character of cities. It is a human need to organize the physical environment in an orderly and desirable manner.

The Architects as creators of built environment should be aware of pollution and should work to eliminate it. The environmental pollution or disorder becomes a consistent threat to all subject of society, living and unloving. Hence considering the gravity of harmfulness of pollution, people should always endeavour to eliminate the harmful gestures.

0.2 Aims and Objectives of the Study

The study is attempted to explain the architectural pollution and how it maintain and protect the city character from its impacts.

Therefore one of the objectives of this study is to establish a theoretical concept, which helps to recognize the architectural pollution and to demonstrate a positive connection between pollution and violation of the principles of architectural composition.

And this would help to identify the main causes of disorder in present cities. Also it is discussed about city character and how it will affect from architectural pollution and explain the connection between city character and architectural pollution. At the same time this study will help to identify the various steps that should be taken to over come architectural pollution in cities. Lastly destroying the city character by accepting the disorder will be discussed with special reference to Kurunegala.
0.3 Scope and Limitations

City is composed from nodes, paths, landmarks and districts etc. Among these, district or small region of the city can be taken as a main element of a city. Also it consider as collective component of other city components. Study is limited to this main element. Ultimate target of this study is to gain knowledge about the effects of the architectural pollution in the visual environment and how it affects the people and the harmony of the environment. The study limits its scope to explain how pollution occurs on theoretical basis. The study pays special attention to Kurunegala as a developing town in the country which had the very strong character. Kurunegala is also taken to demonstrate the pollution in the visual environment and destroying the character of the cities.

0.4 Method of Study

In this firstly; it will do literature survey to identify definitions of responsible factors of architectural pollution. Then on the basis of that knowledge theoretical framework will be formulated to identify causes of architectural pollution. After that the causing factors will be analyzed with explaining architectural pollution using some examples. Finally this framework applies to example city and find out how architectural pollution affect to its character. Before do this, data will collect from that city by investigating its dweller and physical setting to identify its character. Then search how this character will lose due to architectural pollution.