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ACOUSTICS IN ARCHITECTURE
AN EXAMINATION OF ITS ROLE AS AN ELEMENT CONTRIBUTING
TO THE QUALITATIVE ATTRIBUTES OF SPACE

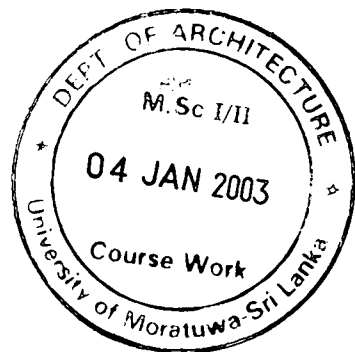


A Dissertation

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Master of Science
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by

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ABSTRACT :

Architecture is inherently an art form of the body and all our senses. It creates a meaningful framework for the activities of the man by controlling and regulating the interrelationship between the man and his living environment. Since architecture should be an occasion of making a place by adding continuous articulation of human habitat, the reproduction of freestanding buildings will become an environmental destruction. So, an architect, beyond the authentic artist, must engage to make concrete the ideal view of life. Architecture, as meaningful buildings, should communicate its meaning through the organization of elements, which are considered as timeless and fundamental vocabulary in architecture. However, the required state of mind or the mood in architectural spaces could be generated through various combinations and relationships of so called spatial volumes.

In consideration of acoustics as an aesthetic element, the architect has before him the aesthetic problem of unfamiliar forms because, in architecture, beauty and familiarity are closely linked in a manner more binding than in other arts. However, in designing an acoustically favorable space, architect should recognize and use acoustic character as the basics of his idea. Although he has new materials, there is no other process of making it beautiful than the old process used by long ago by Greek Architects of contemplative design – emphasizing the essential character, economizing effects and adding ornaments. So, it is obvious that, the factors making for good or bad acoustics are not all new: some of them were most fundamental to buildings in old period and have been recognized in the past by acute designers such as the builders of Greek Theatres. When attention has been paid to special acoustic requirements, certain standard types of architecture have arisen such as classic theatres, the Leipzig concert hall, the Italian opera house, and the English House of Commons. These types have given satisfaction for generation. So, the great history of architecture has to be touched to see the good performance of great architecture. They have been created through symbolic and emotional ideas of their traditions and the culture. Since the aesthetic experience is a matter of all our senses beyond the visual expression, the “aural environment” will be significant as an inherent attribute contributing to articulate human habitat in three-dimensional spatial volumes in architecture.