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CHARNKLA LEERAKUL : INTERPRETATION FOR SCIENCE MUSEUM  
SPACE: A CASE STUDY OF THE NATIONAL SCIENCE MUSEUM, PATUMTHANI,  
THAILAND. THESIS ADVISOR: PROF.ROSS KING, Ph.D., 267 pp.

A science museum has specific functions different from other kinds of buildings. Its architecture, interiors and exhibitions are unique. Museum space follows function and its interior space should respond to and go well with its exhibitions. In addition, the exhibitions, presentations and displays should be interesting and interactive. The architecture should communicate scientific feeling and thought to the visitors. The purpose of this dissertation is to find interpretation guidelines for a science museum and appropriate methods of communicating with visitors via the museum's exhibits, interiors and exterior.

This research reviews museum theory, interpretation and spatial communication as a theoretical framework. The dissertation also focuses on the National Science Museum (NSM), Patumthani, as the sample case study. The necessary data are on museum architecture, interiors and exhibition design. Policy, urban context and nationality are significant issues in this study. The observations and interviews of both visitors and museum officers and questionnaire provide the empirical data, to be integrated with the documentary research. The overseas science museums brought to compare with the NSM are the National Science Museum, Tokyo, and National Museum of Science and Industry, Paris. The researcher focuses on three issues: 1. Site location and urban condition, 2. Buildings, surroundings, and architectural interpretation, and 3. Museum interiors, activities and exhibitions.

The findings suggest that the three National Science Museums have similarities and differences according to their site locations, interior spatiality and exhibitions, and in their architecture, which are iconic of museums. Government policy, history and urban context are the variables for this study. They affect each science museum's interpretations. The solutions are guidelines for science museum design and, more generally, for other kinds of museums.

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Thesis Advisor's signature .....

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