

46056951: MAJOR : ARCHITECTURAL HERITAGE MANAGEMENT AND TOURISM
KEYWORDS: SCIENCE MUSEUM, ARCHITECTURE, INTERIOR, EXHIBITION,
SPACE, INTERPRETATION, COMMUNICATION, PRESENTATION, DISPLAY

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.

Student's signature.....

Thesis Advisor's signature

Acknowledgements

This dissertation was successful with the kindness, help and aid from various persons to whom the researcher would like to express gratitude.

1. Researcher's Father and Mother who gave the willpower and support the researcher throughout from the beginning. For the best aspects of this dissertation, the researcher dedicates them to his parents.

2. Professor Dr. Ross King, the Professor at the Faculty of Architecture, Silpakorn University. For this dissertation, Prof. Dr. Ross is the researcher's supervisor who has emphasized the state of the art, given advice and consulted with the researcher on both knowledge and skills throughout the dissertation process.

3. Professor Dr.Trungjai Buranasomphob, Director of the International Program in Architectural Heritage Management and Tourism at Silpakorn University. During the study at Silpakorn University, her kindness has provided an opportunity for the researcher in learning and academic activity, including this dissertation.

4. Professor Dr.Preechaya Sittipun, the researcher's Professor at the Faculty of Architecture, Chulalongkorn University, has taught the researcher in various subjects which have proved useful for this Ph.D research, including Methodology in Architectural Research, Creative and Critical Thinking and Development in the Body of the Knowledge in Advanced Architecture. In addition, Prof.Dr.Preechaya also inspired the researcher to study at Ph.D level. Her contribution has been remarkable.

5. The researcher would like to thanks Professor Dr. William R. Chapman, an examiner, as well as the various professors, officers and friends who helped with this dissertation from the beginning until the present.

The researcher also acknowledges, with many thanks, the National Science Museum visitors and officers and those who gave their time and thought in filling out and returning the research questionnaire and in giving their interviews. Without all of them, this dissertation would not be complete.

Finally, the researcher thanks the Graduate School of Silpakorn University for their support and guidance in the carrying out of this Ph.D. dissertation, and for their administrative monitoring of this research from the beginning until it was completed.