Keynotes: International standards on the conservation of World Heritage Sites

1. From Venice Charter to Nara+20

The presentation explains comprehensively the development of philosophy of heritage conservation, from 1965 when The International Charter for the Conservation and Restoration of Monuments and Sites was conceived in Venice, to the revolution of concept of authenticity through Nara Document on Authenticity in 1993 and its even more progressive offshoot, the Nara+20 on Heritage Practices, Cultural Values and the Concept of Authenticity (2014).

Dr. Gamini Wijesuriya
Dr. Wijesuriya’s expertise covers disciplines of historic preservation, archaeology and heritage management. He served as the Director of Conservation in Department of Archaeology of Sri Lanka from 1983 to 1999, and as the Principal Regional Scientist of Department of Conservation in New Zealand from 2001 to 2004. He was involved in developing scientific research strategies for heritage conservation, with extensive list of published works. At present, he is a Project Manager of the Sites Unit of International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM). He coordinates courses on conservation of built heritage and World Heritage activities, and oversees the Living Heritage Sites programme.

Main references:
- Nara+20
- World Heritage Resource Manuals

2. The latest development of guidelines and standards on the management of archaeological heritage

The presentation addresses the difference of outcomes generated from approaches with suitability and feasibility, when applying the concept of World Heritage Convention and its Operational Guidelines. The debate has led to the draft of ICOMOS-ICAHM guidelines to recommend approaches to assess the feasibility of establishing a sustainable management system for archaeological sites that are open to the public, and to guide the development of such system.

Dr. Douglas C. Comer
Dr. Comer is currently a Co-President of International Scientific Committee on Archaeological Heritage Management (ICOMOS-ICAHM). He also co-edited ICAHM’s latest publication series Multidisciplinary Perspectives in Archaeological Heritage Management. A Fulbright scholar in cultural resource management, he has served as research fellow at the South-East Asian Center for Archaeology and the Fine Arts (SPAFA) in Bangkok and a chairperson of the Nominating Committee for the Register of Professional Archaeologists (RPA). He is also a Principal of Cultural Site Research and Management Inc. (www.culturalsite.com), which operates in several regions including South-East Asia. He specializes management planning and archaeological interpretation, as well as the use of aerial and satellite remote sensing for archaeological research and resource protection.

Main reference:
- Guidelines for Management of Public Archaeological Sites, ICOMOS-ICAHM
3. Mỹ Sơn World Heritage Site and its Conservation

The presentation showcases processes of conservation of Mỹ Sơn Sanctuary World Heritage Site. It explicates characterization of original materials and techniques, analysis of causes of damage, methodologies of intervention and selected materials and techniques for conservation and restoration.

Mr. Ðặng Khánh Ngọc

Mr. Ðặng Khánh Ngọc is a specialist conservation architect of Institute of Conservation of Monuments, Ministry of Culture, Sports and Tourism, Viet Nam. He has been involved in the conservation and management of Mỹ Sơn Sanctuary World Heritage Site since the early time of its nomination to the World Heritage status in 1999. His expertise concerns geometric recording of archaeological monuments, investigation of traditional building techniques and materials, particularly for brick-associated architecture of ancient Cham civilization.

4. Angkor World Heritage Site and its Conservation

The presentation explains the evolution of the use of brick and stone in Khmer civilization that has influenced the particular history of restoration approaches at Angkor World Heritage Site. It also provides a case study of decision between structural consolidation and restoration, as well as suggests new possible approaches.

Dr. Christophe Pottier

Dr. Pottier is an experienced architect/archaeologist specialized in Khmer-influenced historic structures. His Ph.D. research at Sorbonne Nouvelle contributed to the organization of the Angkor territory. He also worked with Mr. Pierre Pichard, an EFEO architect, for the restoration of Phanom Wan temple in Thailand. In 1999, Dr. Pottier became the Head of the EFEO Centre in Siem Reap, carrying out research in fields of architecture and archaeology of Angkor in parallel to restoration activities, and later took the position of Director of the Cambodian-French Archaeological Mission on the Angkor Region. The Mission’s excavation campaigns discovered some extraordinary traces of the initial phases of historical occupations of the area of Angkor.
Session 2: Brick monument conservation in Historic City of Ayutthaya World Heritage Site: challenges and responses

5. Conservation of Historic City of Ayutthaya World Heritage Site against Big Floods

The presentation recounts Dr. Nishiura’s mission as an ICOMOS advisor to survey post-flood restoration of Historic City of Ayutthaya and provide recommendations to the World Heritage Committee regarding the state of conservation of the site. It details his observation on direct impacts of the floods to the historic structures and interior mural paintings. The speaker also encloses suggestions to Fine Arts Department on both modern and traditional measures to mitigate the flood risk in the future.

Dr. Nishiura Tadateru

Dr. Nishiura is a well-known scholar and professional in the field of conservation science. He is also a Professor at Institute for Cultural Studies of Ancient Iraq of Kokushikan University, and has been the Head of Asian Cultural Heritage Conservation Division, Tokyo National Research Institute of Cultural Properties, Japan. One of his vast research interests also interjects contemporary discussion on the treatment of archaeological remains that are still considered as living heritage to the surrounding communities, with case studies also including sites in Thailand.

6. The development of Master Plan for the Management of Historic City of Ayutthaya World Heritage Site

The Fine Arts Department has revised a new Master Plan for the Management of Historic City of Ayutthaya World Heritage Site (2016). The plan tackles three key issues, namely, (1) cooperation between different agencies, (2) law enforcement and monitoring measures and (3) approaches that are relevant to present situation. The Master Plan specifies measures to improve regulations of Fine Arts Department in controlling buildings and structures within the area of archaeological remains in the island district of Phra Nakorn Si Ayutthaya, in accordance to the Ancient Monuments, Antiques & National Museums Act (1961). Such measures include suppression, demolition and modification of new buildings, controlled height of buildings, distance from archaeological ruins, forms and materials used for construction that conform with the historic environment, as well as activities that are allowed within the areas of historic sites.

Mr. Anan Chuchote

Trained on both archaeology and education management, Mr. Chuchote began his career at the Fine Arts Department in 1984 and has accumulated his professional experience in the field of museum and historic park management in several provinces and regions of Thailand, including Sukhothai, Lopburi and Ayutthaya. He served as Deputy Permanent Secretary of the Ministry of Culture before returning to the Fine Arts Department as the Director-General.

7. Preventive measures for a brick monument from salt weathering: an on-site study at Wat Mahathat, Ayutthaya

The collaborative project between Japan’s National Research Institute of Cultural Properties and Fine Arts Department to investigate environmental impacts to the historic sites started in 1992. It engrossed extensive site surveys and records on weathering states of damaged brick walls at Wat Mahathat, and introduced on-site experimentation of hydrophobic treatment. The result monitoring over a decade has revealed the durability of such treatment.

Dr. Masahiko Tomoda

Dr. Tomoda is a conservation expert from the National Research Institute of Cultural Properties in Tokyo (NRICPT). He has been involved in international projects to survey and research on methodologies to protect cultural heritage sites in many countries, such as Bhutan and Viet Nam, as well as post-disaster assessments for Kathmandu World Heritage Sites, Nepal. He has also worked for a UNESCO project to provide technical support for the safeguarding of Bagan Archaeological Area and Monuments, Myanmar. The project has produced standard and guidelines for site officials to adopt for future condition assessment of monuments.
8. German Wat Ratchaburana Safeguarding Project - Documentation, research, conservation and training

The German Wat Ratchaburana Safeguarding Project began in 2012 after the flood. The German Government offered direct support to the Ministry of Culture in conservation of one of five temples in need of urgent intervention. The project was implemented in 5 phases in parallel with on-site training of a group of workers from Fine Arts Office 3 Ayutthaya.

1. Workplan and scope of the project: covering restoration of stucco and plaster on the main prang and its pedestal and the front vihara.
2. Identification and documentation of archaeological artefacts, in particular pieces of Buddha images scattered across the temple. Thorough measurement and recording helped saving time and labour.
3. Site Documentation which includes mapping of deterioration patterns of different sides of the main prang, scientific experimentation to identify formulae of lime that are compatible to the site.
4. Application of experimented materials, development of restoration plan in line with conservation principles, and implementation of the plan.
5. Quality control, maintenance plan and production of handbook on stucco conservation specially for Wat Ratchaburana.

Dr. Hans Leisen

Dr. Leisen is a Professor Emeritus of the University of Applied Sciences in Cologne. He has worked with and brought up young experts from his team of international apprentice students. He holds a Ph.D. in Geology and Paleontology from Ludwig-Maximilian University, and has extended his professional experience as stone conservator. His field projects span to Egypt, Indonesia and Thailand. He and Dr. Esther von Plehwe-Leisen have been working on German APSARA Conservation Project at Angkor, Cambodia, since 1995.

9. Conservation and training project at Historic City of Ayutthaya

The project received Ambassadors Fund for Cultural Preservation grants through the US Embassy in Thailand and World Monuments Fund’s additional funding through the Robert Wilson Challenge Grants. With the focus at conserving monuments in Chai Wattanaram Temple Complex, the FAD-WMF partnership mapped out four principal activities:

1. Designing and reconstructing the south flood barrier,
2. Updating base documentation on existing conditions,
3. Developing flood and drainage master plan, and
4. Organizing pilot conservation programme with a capacity building component for Fine Arts Department staff.

Training workshops that have been organized to benefit the Fine Arts Department, to date, include (1) bio-growth cleaning methods on historic buildings, (2) animal pest control for monuments and archaeological sites, (3) brick conservation in Southeast Asia, and (4) injection grouts for architectural surfaces and first approaches to stucco and wall painting cleaning methods. Two more workshops have been foreseen for lacquer and decorative surfaces conservation and wall painting conservation.

The presentation also proposes World Monuments Fund’s recommendation to train skilled masons and workers, who work on historic buildings but have no awareness in conservation principles and materials, to become the key persons in carrying out future conservation project and daily care of the monuments and artefacts.

Ms. Josephine D’Ilario

Ms. D’Ilario is an Art Conservator, Restorer and Conservation Consultant. She has been working as the key expert for World Monuments Fund’s collaboration with Fine Arts Department at Chai Wattanaram Temple. From 2004 to 2012, she worked as Field Project Coordinator for Aga Khan Trust for Culture’s projects in Egypt, Syria, as well as the large-scale restoration project of the Great Mosque of Djenné in Mali.
10. Traditional Knowledge System in the Conservation of World Heritage Sites in India

The presentation details out two Indian case studies of conservation of Moghul Empire’s Serai Lashkari Khan, which is a part of a World Heritage Tentative List Site, and Qila Patti of Tarn Taran District. The two examples reflect the careful application of processes and principles of conservation in reality, from preparation of comprehensive conservation plan, material and technique studies, monument condition mapping, value and risk identification, assessment and analysis, to debates on appropriate application of fundamental conservation principles to control the intervention to the site’s integrity. The speaker emphasizes the importance of understanding the science of materials to the assurance of work quality and the understanding of communities, including local people, pilgrims and tourists, and their expectations of the place. She also suggests post-restoration measures, such as rainwater management that supports the sustainability of the site.

Dr. Gurmeet Rai
Dr. Rai is the Founder and Director of the Cultural Resource Conservation Initiative (CRCI) in India since 1996 (www.crci.co.in). A conservation architect based in New Delhi, she has worked on conservation projects throughout India, particularly in Punjab where she has extensively surveyed and documented historic buildings. She serves as a Managing Trustee of the Punjab Heritage Preservation Trust. Dr. Rai directed two restoration projects, the Krishan Temple and Lakhpat Gurudwara, which received UNESCO Asia-Pacific Awards for Cultural Heritage Conservation in 2001 and 2004, respectively.

11. Use of traditional materials and techniques in the conservation of Angkor World Heritage Site

The presentation underscores the importance of scientific research and multidisciplinary approaches to learn about traditional materials, designs and techniques of the brick-associated monuments. It is essential that the conservators know first how ancient bricks and pastes were made and used, how construction techniques were adopted, as well as the architectural and structural behaviors. Despite extensive studies of various exemplary ancient Khmer sites, little have we known of the sophisticated technical knowledge on construction from thousand years of history. Nevertheless, professionals have managed to learn useful information from their hands-on experience at conservation and restoration projects in Angkor. The speaker will present the experience on the recent project on structural intervention that he has been involved, especially on the use of traditional materials and techniques, and discuss on what we need to know more about the brick-built temples for better conservation.

Dr. Ly Vanna
Dr. Ly Vanna is the Director of the Department of Conservation of the Monuments in the Angkor Park and Preventive Archaeology, APSARA National Authority. He holds a Ph.D. in Area Studies from Sophia University, Japan, specialized in Archaeology. His work and research focus is on the case-specific analysis on application of traditional and modern techniques for the rehabilitation and restoration work.
12. Revival of Thai traditional building craftsmanship for World Heritage conservation

The presentation backgrounds on the World Heritage Committee’s recommendations for actions to Thai Government, which have led to several parallel projects and collaborations with international organizations. The Fine Arts Department has directed their activities in three main tiers:

1. Curriculum development and capacity-building activities for professionals involved in conservation,
2. Comprehensive updating of Management Plan and establishment of local control mechanism, and

Using experience gained from cooperation with international institutes both on field research and capacity-building, Fine Arts Department has initiated a project with UNESCO Bangkok to develop curriculum that is compatible to needs of different groups of professionals and workers involved in conserving Thailand’s cultural World Heritage Properties with Historic City of Ayutthaya as the pilot site.

Supported generously by the Crown Property Bureau, the project encompasses pre-execution analyses on situation of workmanship and cultures (social anthropological approaches) and scientific field collection and laboratory sessions to find out physical, chemical and mechanical properties and decay mechanism of different materials used to build and restore archaeological sites in Ayutthaya. The two analyses are the basis for knowledge, skill sets and teaching approaches used in delivering the curriculum, and subsequently, in the revision of policy that encourages more qualitative project monitoring.

Dr. Amara Srisuchart

Dr. Srisuchart is an Honorary Expert at Fine Arts Department with expertise in archaeology, museum and artefact studies. She is the author of numerous academic publications from her experience in surveys, excavations and investigation of prehistoric and historic evidences in South-East Asia, such as Srivijaya and Khmer Kingdoms.

13. Use of traditional materials in stucco conservation in Thailand

This presentation explicates the procedures in conducting conservation of stucco and mural paintings by Fine Arts Department, from the steps of desk-based research on palm-leaf scriptures, historical documents as well as oral tradition of master artisans that has passed on for generations. The process of identifying the materials that have the most similar components to the traditional materials involves the thorough study of related natural resources and usage in ancient time. Mostly we have found that the necessary resources are still widely acquirable in the locality where the heritage sites are situated. There are only few materials that we need to seek for quality production elsewhere. Upon collecting all the comparative materials, we undertake experiments to mix different ingredients for different purposes of application in the conservation, adhering to the principle that the newly mixed or produced materials must be similar to the original materials as much as possible. Therefore, on-site testing is an unavoidable process.

Mr. Apichat Suwan

Mr. Suwan is a trained professional artist and painting conservator. He started working for Conservation of Painting and Sculpture Group, Archaeology Division, Fine Arts Department, since 2006, and has had experience in mural painting conservation projects in numerous temples, particularly in Central and Northeastern Regions of Thailand.