Training Report on Cultural Heritage Protection

The Training Course for Researchers in Charge of Cultural Heritage Protection in Asia and the Pacific 2006 — Palau — 17 August — 15 September 2006, Nara

Cultural Heritage Protection Cooperation Office, Asia/Pacific Cultural Centre for UNESCO (ACCU)

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Preface

Preface

The Cultural Heritage Protection Cooperation Office, Asia/Pacific Cultural Centre for UNESCO

(ACCU Nara) was established in 1999 with the cooperation of the Agency for Cultural Affairs,

Nara Prefectural Government and the Municipal Government of Nara. Since its establishment, the

ACCU Nara Office has worked towards the protection and investigation of cultural properties

through training courses, international conferences, public symposia and database production.

Training courses on the investigation and protection of cultural heritage form an important part of

our activities. These training courses are of two types: group courses of about one month for some

fifteen participants and individual training on particular topics for two participants. The present

course was the second type and was held in association with the National Research Institute for

Cultural Properties. This time we welcomed two specialists from Palau.

Palau is renowned for its traditional architectural structures, 'A bai', congregation centre with the

indigenous design and elaborate ornamentation and its major archeological sites, 'Ked'. There are

numbers of archaeological sites and artifacts in Palau, however, the present environment in cultural

heritage protection is absolutely insufficient in human resources. With the aim at contributing

Palauan future in the protection of cultural properties, a sequence of training course focused on

mainly excavation of archaeological sites and conservation has been designed to launch.

Finally, we wish to thank Gango-ji Institute for Research of Cultural Properties, National Museum

of Ethnology, Tenri University, Tenri Sankokan Museum, for their assistance with this training

course.

YAMAMOTO Tadanao

Director

Cultural Heritage Protection Cooperation Office,

Asia/Pacific Cultural Centre for UNESCO (ACCU), Nara

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I Introduction

- 1. General Information
- 2. Programme Schedule

1.General Information

Training Course on Cultural Heritage Protection in the Asia-Pacific Region

(17 August – 15 September 2006, Nara)

1. Organizers

Jointly organized by: *Bunkacho* (Japan's Agency for Cultural Affairs); the Asia/Pacific Cultural Centre for UNESCO (ACCU); the National Research Institute for Cultural Properties

2. Background

Republic of Palau, consisting of about 300 islands in the Micronesian region of Pacific Ocean, was explored and recognized by the Spanish in the 16th century. It was granted independence in 1994 after having gone through the occupation and mandatory rule by Japan in the beginning of the 20th century, and the era of trusteeship by the United States following World War II. At present Palau is a nation with the population about 20,000, comprised of 16 administration districts, and fishery and tourism as its major industries.

Palau is also renowned for its traditional architectural structures, 'A bai', congregation centre with the indigenous design and elaborate ornamentation and its major archeological sites, 'Ked'. As for relation with Japan, after World War I, a great number of Japanese migrated to Palau since Empire of Japan set it as a mandatory ruled territory, and founded the branch office of Agency for Southern Pacific at Koror, the capital of Palau. Consequently, the Japanese cultural influences, such as architectures, words, food, songs and names of people, still linger on, and are transformed into a part of Palauan culture and history.

However, in terms of cultural heritage protection, the value and presence of cultural heritage itself has not been fully comprehended because of the geographical circumstances of the country that is a nation comprised of remote islands isolated in the Pacific Ocean. Moreover since there are few personnel to conduct the protection and investigation of heritage resources, the training of personnel necessary for cultural heritage protection is an urgent issue.

3. Date and Venues

Date: Thursday 17 August to Friday 15 September 2006

Venues: Cultural Heritage Protection Cooperation Office, ACCU (ACCU Nara); National Research Institute for Cultural Properties, Nara; Tenri University; Tenri Sankokan; National Museum of Ethnology, Osaka etc.

4. Objective of the Training Course

There are numbers of archaeological sites and artifacts in Palau, however, the present environment in cultural heritage protection is absolutely insufficient in human resources. With the aim at contributing Palauan future in the protection of cultural properties, a sequence of training course focused on mainly excavation of archaeological sites and conservation has been designed to launch.

5. Training Curriculum

- Observation and Analysis Methods for Human Bones
- Observation and Analysis Methods for Animal Bones
- Introduction to Conservation Science
- Conservation and Development for Archaeological Sites
- Recording methods of Archaeological Sites
- Work Shop: Excavation of Archaeological Sites
- Classification and Measuring and Drawing of Archaeological Artifacts
- Protection and Utilization of Cultural Heritage Resources

6. Participants

Roland Merar (Mr)

Director/Historical Preservation Officer, Bureau of Arts and Culture, Ministry of Community and Cultural Affairs, Republic of Palau

Loyola Darius (Ms)

Historic Preservation Specialist, Bureau of Arts and Culture, Ministry of Community and Cultural Affairs, Republic of Palau

7. Others (Past achievement to accept trainees)

Since 2000 when the above-mentioned invitation programme started, 17 trainees from 9 countries have been accepted. It is the first time to invite trainees from Republic of Palau.

8. Certificate

Each trainee will be awarded a certificate upon the completion of the course.

9. Language

The working language of the course will be English.

10. Expenses

Expenses for participants for the training course shall be borne by ACCU and comprise the

following:

(1) Travel expenses:

Participants shall be provided an economy-class return air ticket between the international airport nearest to his/her residence and Kansai International Airport, and domestic transportation costs / to and from the airports and between the training venues in Japan.

(2) Living expenses:

Participants shall be provided a daily subsistence allowance during the training course, beginning from 17 August (Thursday) to 15 September (Friday) 2006. Arrangements for accommodations will be made by ACCU Nara.

11. Secretariat

YAMAMOTO Tadanao (Mr)

Director

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2.Programme Schedule

Day		Lecture			
	16 Wed	Arrival			
	17 Thu.	Opening Ceremony /Orientation	ACCU		
	18 Fri.	Introduction to Environmental Archaeology	NRICPN		
	19 Sat.				
	20 Sun.				
	21 Mon	Observation and Analysis Methods for Human Bones	NRICPN		
	22 Tue.	Observation and Analysis Matheda for Animal Dance	NIDICDNI		
_	23 Wed		NRICPN		
3n V	24 Thu.	Collecting, Observation and Analysis Methods of Small Artifacts	NRICPN		
August	25 Fri.	Practice on Presentation and Management Methods of Folklore Materials	NME		
	26 Sat.				
	27 Sun. 28 Mon	Introduction to Conservation Science	GIRCP		
	29 Tue.	Introduction to Conservation Methods for Metal Objects	GIRCP		
	30 Wed	· ·	GIRCP		
	31 Thu.	Introduction to Conservation Methods for Organic Remains	GIRCP		
	1 Fri.	Information Exchange on Folklore Research etc. in Palau	TU		
		Management and Display Methods for Museum Collections	TSM		
	2 Sat. 3 Sun.				
	4 Mon	Classification and Measuring and Drawing of Archaeological Artifacts (Mainly on Pottery)			
	5 Tue.		NIDICIDA		
	6 Wed	Recording Methods of Archaeological Sites (Plane Table Survey etc.)	NRICPN		
Sep	7 Thu.	Work Shop : Excavation of Archaeological Sites	NRICPN		
tem	8 Fri.				
eptember	9 Sat. 10 Sun.				
•	11 Mon	Conservation and Development of Archaeological Sites (On-site Lecture)	NRICPN		
	12 Tue.	Conservation and Utilization of Cultural Heritage Resources / Risk Management for Cultural Heritages	ACCU		
	13 Wed	Conservation and Utilization of Cultural Heritage Resources	ACCU		
	14 Thu.	Final Reports by Participants	ACCU		
	15 Fri.	Submission of Final Report / Closing Ceremony	ACCU		
	16 Sat.	Departure			

NRICPN National Research Institute for Cultural Properties, Nara

NME National Museum of Ethnology

GIRCP Gangoji Institute for Research of Cultural Property

TU Tenri University

TSM Tenri Sankokan Museum

II Summary of Lectures

Summary of Lectures

18 August (Fri.)

Lecture: Introduction to Environmental Archaeology < Dr Matsui, Mr Nayauchi / NRICPN>

- General information on Environmental Archaeology:
 - Zoo archaeology,
 - Soil analysis
 - Botanical archaeology
- Introduction of Dr Matsui's latest research
- Watch recorded TV programs
- Dr Matsui's scholarly achievements
 - Interdisciplinary research
 - Archaeological background
- Explanation of the bones of deer by using a replica:
 - Names, functions, and characteristics to identify each bone
 - Basic structures of the bones

21 August (Mon.)

Lecture: Observation and Analysis Methods for Human Bones <Ms Lee Ai Ling / NRICPN>

- Introduction to Human Osteology
- Lecture on names of the bones
 - Skull and upper body in detail
 - Characteristics and function of each bone

22 August (Tue.)

Lecture: Observation and Analysis Methods for Human Bones < Ms Lee Ai Ling / NRICPN >

- Introduction to Human Osteology (cont.)
- Lecture on names of the bones
 - Lower half of the body
 - Characteristics and functions of each bone
- Workshop
 - Identification of the bones in fragments
 - Information from human bones (age range, sex difference etc.)



Lecture on Introduction of Environmental Archaeology at NRICPN



Explanation of the bones of deer by using a replica at NRICPN



Lecture on names of the human bones at NRICPN



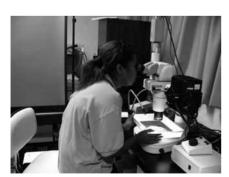
Separate the soil of the well at Saidaiji.



Examining the relics under a microscope



Explanation of avians and fish bones



Observing the relics under a microscope

23 August (Wed.)

- Visit: The well site at Saidaiji
 - How the excavation was done in practice
- Workshop:
 - ① Separate the soil of the well at Saidaiji site
 - Put the soil into 5-liter beaker
 - Add water to remove muddiness (flotation method)
 - Put the residue through four sieves (four different mesh sizes)
 - ② Observe specimens with the naked eye before microscopic observation
 - ③ Pick up seeds, insects, charcoals and fragments of wooden tablets with a pair of tweezers
 - 4 Examine the relic under a binocular microscope

August 24 (Thu.)

Lecture: Collecting, Observation and Analysis Methods of Small Artifacts < Dr Matsui, Ms Hirofuji / NRICPN>

- Explanation of avian bones and fish bones
 - Names and characteristics
 - How each bone joins with other bone
- Workshop: Identification of fish bones
- Lecture: Excavation of shell middens
 - ① Important findings from unearthed artifacts: human bones, woven baskets, stone knives, wooden drills, stone axes, obsidian flakes etc.
 - 2 Date determination of shell middens
 - Marine reserver effects
 - ③ Topics from Dr Matsui's experiences of shell midden excavations
 - Higashimyo site in Saga Pref.
 - Yokoo site in Oita Pref.
 - Kimhae shell midden in Korea

25 August (Fri.)

Visit: Lecture: National Museum of Ethnology at Suita City (Osaka Pref.)

Lecture: Practice on Presentation and Management Methods of Folklore Materials etc.< Dr Into, Mr Ishimura / NME>

- Guided tour by Mr Ishimura of the permanent collection exhibition
 - Collections especially from Pacific regions
 - The storage rooms of the Museum
 - Artifacts from Palau
- Lecture: Prehistory of Palau by Dr Into and introduction of her research
- Exchange of information and introduction of useful reference books

28 August (Mon.)

Visit: Gangoji Temple, Headquarters of GIRCP

 A courtesy call on Rev. Tsujimura Taizen, chief priest of Gangoji Temple and Director General of Gangoji Institute for Research of Cultural Property

Lecture: Introduction to GIRCP, Conservation Science <Ms Ueda / GIRCP>

- General information about GIRCP, History, Organization
- Facility Tour:
 - Painted Cultural Property Laboratory
 - Folk Cultural Property Laboratory
 - Excavated Wood Laboratory
 - Excavated Metal Laboratory
 - Excavated Earthenware and Terracotta Laboratory

Facility Tour <Mr Kawamoto / GIRCP>

Analysis of metal samples

- General information about Analytical Appliance Room
- Analysis of a metal sample
 - An energy dispersive fluorescence X-ray spectrometer
 - Composition of the metal is shown on the screen.



Visit to NME, guided tour by Mr Ishimura



Lecture on prehistory of Palau by Dr Into



Lecture on Introduction to Conservation Science at GIRCP



Facility tour in GIRCP, by Ms Ueda





Microscopic observation to identify the wood species

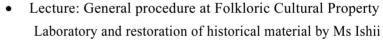
Lecture: Research on Identification of Tree Types **Workshop: Identification of tree types <**Ms Inoue /GIRCP>

- Cut the wood block with a razor in three different
- directions:
 - A cross section
 - A radial section
 - A tangential section
- Make thin layer specimens
- Safranine staining
- Make a permanent preparation
- Microscopic observation to identify the wood
- Determination of wood by comparison with standard specimens
 - Coniferous trees
 - Broad-leaf trees

29 August (Tue.)

Introduction to Conservation Methods for Stone Objects

(Ms Ishii, Mr Amenomori / GIRCP)



- Work flow of a conservational treatment
- (1) Fumigation(ethylene oxide gas or CO₂ method)
- 2 pre-treatment examination
- (3) determination of treatment policy
- (4) photography
- (5)research analysis (X-ray or infrared)
- (6) preliminary cleaning
- $\overline{(7)}$ desalination
- (8) drying
- (9) secondary cleaning
- (10) rust proofing
- (11)restoration/reconstruction with glue
- (12) application of a preservative or insecticide
- $\widehat{(13)}$ color with an acryl paint
- (14)photography
- written reports





Lecture on genaral procedure at Folkloric Cultural Property Laboratory

Workshop: A treatment of stone objects

- ① Treatment of a broken small statue *Jizo* from Gangoji Temple
- Join two pieces with acrylic resin (Araldite 201) and epoxy resin.
- Mix filling material.
 - Knead K Mortal and hardener well.
 - Leave it for a while until it becomes as soft as clay.
- Fill the gaps with K Mortal.
- Color touch up
 - Press the various colored pigments and grinded stones on the surface of fillings with spatula to cover gaps.
- ② A treatment of a stone for conservation
- Clean the stone.
- Brush dirt and dust with a brush and a bamboo split
- Dip the brush in ion-exchanged water and brush the stone with it.
- Wipe away the dirt and lichen with a cloth.
- Dip the stone in stone-consolidator solution (OH100).
- Pour the solution several times until the stone surface shines.

30 August (Wed.)

Lecture: Introduction to Conservation Method for Wooden Objects <Ms Ishii, Mr Amenomori / GIRCP>

- A wide variety of treatment, including PEG impregnation, freeze drying, sugar alcohol, and alcohol-xylene methods
- The treatment method most appropriate for the tree species and state of artifact should be chosen and the procedure should be performed with due care to prevent deformation and shrinkage of the wooden blocks.
- After the preservation treatment
 - The artfact is subjected to surface treatment and adhesion/restoration.
 - Hands-on training, including using water to remove the earth from excavated wooden blocks, using



Fill the gaps with K Mortal.





Brush dirt and dust with brush and bamboo split.



Removal of the earth from excavated wooden blocks





Surface treatment and restoration

Observation of the metal objects

adhesive to fill cracks in wood blocks after chemical processing and coloring the adhesive to match the wood.

31 August (Thu.)

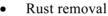
Lecture: Introduction to Conservation Methods for Metal Objects < GIRCP>

Workshop: A Treatment of Metal Objects

- Careful observation of the metal objects
 - The artifact is carefully observed prior to any conservational treatment.
 - Followed by X-ray photography to investigate the inner structure which is not visually apparent.



- Unearthed metal objects are soaked in an alkaline solution for three months to a year for
- any missing parts and a grinder is used to restore their original shapes.



desalination. The artifacts are impregnated with acrylic resin for consolidation. Epoxy resin is used to fill in



Restoration work by using a grinder

1 September (Fri.)

Lecture: Information Exchange on Folklore **Research etc. in Palau** (Dr Yasui / Tenri University)

- Historical maps
- Historical photos
- Survey cards for folk cultural preservation materials
- Digital video tapes to record performing arts



Lecture by Dr Yasui on folklore research in Palau

- Tape recorders and notes for interview to collect oral history
- Exchange of information concerning with Dr Yasui's research in Palau and introduction of useful tools.

Visit: the Tenri Sanko-kan Museum

- Educational tour of the museum
- General repository
- Special repository
- Fumigation room
- Ventilation and humidity control systems
- Fire-fighting systems etc.



Lecture by Ms Sugino on conservation management and display methods for museum collections



Facility tour in the Tenri Sanko-kan Museum

4 September (Mon.)

Classification and Measuring and Drawing of Archaeological Artifacts (Mainly on Pottery)

⟨Mr Nishiguchi, Ms Jinno / NRICPN⟩

- Lecture: General information on the Heijo Palace Site (World Cultural Heritage)
- The history of the Palace Site investigations
- Excavation, preservation and restoration as a national project
- A social role of the Institution
- Reproduction of 8th century people's life in the Heijo Period, when the capital was in Nara by excavated artifacts such as:
 - Wood products, metal objects, and stones
 - Earthenware and potsherds
 - Roof tiles

Explanation of the specific rules in drawing, an East Asia style

- How to make the standard drawing
- How to categorize earthenware by slight differences of shape



Observing roof tiles preserved in NRICPN



Explanation of the specific rules in a measured drawing by Ms Jinno



Measurement of the pottery surface

Workshop: A measured drawing

- Measure the pottery surface from vertical line with a set of squares
- Make a profile of the chipped pottery
- Draw an outline of an elevation



A measured drawing

Useful drawing tools (calipers, *Mako*, drawing pens etc.)

5 September (Tue.)

Classification and Measuring and Drawing of Archaeological Artifacts (Mainly on Pottery) (Ms Jinno / NRICPN)

Workshop: a measured drawing (cont.)

- Draw a ground plan and an elevation of various earthenwares:
 - A stone weight
 - A coin
 - A spindle wheel etc.
- Introduction of useful drawing tools
 - Calipers (to measure the thickness)
 - Mako (to mold the artifacts, a Japanese invention)
 - Drawing pens etc.



Explanation of methods for a theodolite (light wave distance measuring apparatus)

6 September (Wed.)

Lecture: The basics of surveying

- The hands-on training included making measurements using actual equipment
- Measurement of height using a level, which is an instrument for measuring horizontality and position using a theodolite

7 September (Thu.)

Workshop: Excavation of Archaeological Sites

⟨Mr Koike / NRICPN⟩

Lecture: Explanation of divisions of the Heijo Palace Site

- Zones (major divisions): every 531m, nine zones extending north to south
- Segments (medium divisions) : every 60m from south t the Heijo Palace Site
- Areas (minor divisions): 3m grid
- Explanation of Organization and system
- Practical system of excavation and research
- Various tools used for excavation

Workshop: Participants visited the excavation site at Saidaiji for hands-on experience.

8 September (Fri.)

Workshop: Excavation of Archaeological Sites

⟨Mr Koike / NRICPN⟩

- Practical excavation work at Saidaiji Shokudouin (Saidaiji Temple Dining Hall)
 - We worked with staff in peeling away the earth to expose the remnants of the buildings.
 - Measurements of the cross section of the strata at the excavation site
 - We used strings to form coordinate axes at the site, measured the width of the strata and recorded the measurements on a graph paper.

11 September (Mon.)

On-site Lecture: Conservation and Development of Archaeological Sites

(Mr Takase and Mr Nakajima / NRICPN)

12 September (Tue.)

Lecture: Conservation and Utilization of Cultural Heritage Resources (Cases in Japan) $\langle Mr | Ito / ACCU \rangle$



Lecture by Mr Koike on divisions of the Heijo Palace Site



Visit: the excavation site at Saidaiji



Measurements of the cross section



Lecture on how to record the relics on the grid sheet



Lecture by Mr Takase on Conservation and Development of Archaeological Sites



On site lecture by Mr Nakajima in excavation site exhibition hall



Joining the lecture of Group training course

Lecture: Risk Management for Cultural Heritages

(Ms Inaba and Mr Murakami / ACCU Nara)

13 September (Wed.)

Conservation and Utilization of Cultural Heritage Resources 〈Dr Gamini Wijesuriya / ACCU Nara〉

Participants joined the group training class.

14 September (Thu.)

Final reports by participants (ACCU Nara)

Wrote final reports on the individual training course in connection with the situation in Palau.

Lecture: The procedure for the inscription on the UNESCO World Heritage List

15 September (Fri)

Submission of Final Report / Closing Ceremony 〈ACCU Nara〉 Mr Roland Merar and Ms Loyola Darius received the certificates.



Mr Roland Merar and Ms Loyola Darius, rceiving the certificates

Country Report



Present Situation and Needs for Cultural Heritage Preservation in Palau

Roland Merar
Director
Bureau of Arts and Culture
Historic Preservation Office
Ministry of Community and Cultural Affairs, Palau



Palau Society of Historians

The Bureau of Arts and Culture is working closely with the 16 member Society of Historians and the 16-member Palau Historical Advisory Board in preserving protecting Palau's tangible and intangible historical heritage under Palau National Code Title 19. The Bureau of Arts and Culture is operated with one National Archeologist and two surveyors; a Cultural

Ethnographer;Staff Historians; the Palau Register of Historic Places and four Historic Preservation Specialists. Although we are under staffed we are mandated by the PNC Title 19 and US Section 106 to protect and preserve the historical heritage of Palau – in land areas as well as sea areas (Lagoon Monument act).

The Republic of Palau is the only island nation in Micronesia that has such fine historical preservation programs established within its community. Nearly 80 percent of Palau's states have enacted preservation and conservation laws in their territories, and 90 percent of the people support the office of the Bureau of Arts and Culture in preserving and protecting Palau's unique historical and cultural heritage.

Every year the Bureau of Arts and Culture holds a symposium for Palauan Traditional Leaders and community stakeholders on preservation, enforcement and also on marketing

management in conjunction with tourism. This year's symposium focused on the "The Strengthening Preservation on The Palau's Cultural Heritage." The overall goal for the symposium was to amend the Palau National Code to increase penalty fines, and thus improve management plans for all historical sites for tourism purposes as well as for community development purposes. A great turn out of community supporters included a variety of students, parents, teachers, community leaders, and at most importantly, the traditional leaders who are the core decision makers at the state level.

The Bureau of Arts and Culture is under the Ministry of Community and Cultural Affairs which oversees the general preservation and protection of the indigenous rights of the native Palauans as well as the traditional and cultural heritage of prehistoric and historic sites. Its daily tasks are divided these include: equally among its few dedicated staff members in various sections for implementation.

Archaeology Section

Currently, the Archaeology surveyor has completed an interior survey of the northern part of the Big Island of Palau, which is called Babeldaob, but has still not yet surveyed almost 3/4 of Palau due to limited staff and funding. Every Year, the Bureau of Arts and Culture tries its best to survey at least one or two states in timely fashion.



Badrulchau - Monoliths

Although progress seems slow, we are doing as much as we can to preserve and protect our heritage. section This requires another professional archaeologist to assist in speeding up the process before major development moves to the big island. By October 1, 2007, the capital will be relocating to its new location in Melkeok State, which is the heart of the island of Babeldaob. Developers and business people are relocating as well to upgrade the state, which will

have a big impact on traditional and cultural heritage in those remote areas.



Terrace

Cultural Ethnography Section

Every year the cultural ethnography section publishes at least one booklet about the traditional and cultural heritage of Palau. There are many books and written reports about the cultures, customs and history of Palau in our reference library for use by the public and researchers. Traditionally, Palauan oral history was passed on as legends seen in art works, stories, and in song and dance. There was no established orthography to preserve the ancient heritage of long ago, so there are still some histories, and aspects of cultures and customs that have not been written down. In lieu of this, we are making our best efforts to work with the Society of Historians to preserve whatever is left in this generation, for the benefit of future generations.



Historical Booklets on Palauan Oral History

Registering and Restoring Historical Sites

The total number of identified artifacts, bones and historical sites in Palau exceeds 1000 items. As of today, artifacts collected from field sites, and bones that are at least 4500 years old, are just lying around the office. The bones are packed in a box and stored in our conference room. We are not sure whether we are preserving them or destroying them because we do not have the expertise to handle them. Despite the availability of these storing areas, we are depending on Belau National Museum as our depository locale, but as of now they are refusing to receive all of our collection due to lack of space in their building. It is vital that our office learns the proper handling and caring of these artifacts, to ensure the protection and preservation of cultural heritage.



Chades era Miked

Palau villages had a traditional men's house called Bai. The Bai is structured with hard woods and other local materials. During restoration projects of these Bai, we tend not to use traditional wood because we are unfamiliar with the texture as well as the scientific properties of such wood. The lifespan of the Bai usually is not as long as in former ages. We always attribute the cause to the contractors, but we never knew that the environment can also contribute to the shortness of the wood's lifespan. This has

become a predicament in many traditional villages in Palau. We lack the knowledge of how we can preserve the Bai, due to a lack of understanding of wood in traditional lifestyles and the environment.

Palau has stone paths and the traditional house Bai sits on top of stones. These stones still show no valid trace of where they have come from or how they formed. With little understanding of Palau as a volcanic island suggests that we could have access to these rocks at major rivers. But a big question remains today...Where? However, as one looks at these rocks one can tell they must have been formed in other areas, because there are no significant similarities to the rocks found in the major rivers throughout Palau.

Other Major Issues

The Bureau of Arts and Culture is also facing many difficulties in accessing and updating information in a database. We need computer training to update the recording and

processing of historical sites, and the plotting of significant locations on the map as well as registering them. We are also lacking expertise in Maritime Archaeology. Just recently, Palau experienced the "Lionwind" case, where some foreigners took artifacts from a Japanese ship in Palau lagoon. Without much expertise in marine archaeology, we hired outside consultants to assist us in dealing with this case. There are other issues that we have not pursued in court due to a lack of knowledge, expertise and funding at our office. We are lacking training in preserving historic artifacts using chemical components to conduct, analyze and apply treatment to the artifacts, bones or relics that are being excavated or reported. We also lack a laboratory to conduct indoor study. Another main complaint of the public is the lack of an independent archaeological firm in Palau to conduct archaeological survey investigations for any development in Palau. There are also major sites in the big island of Palau that are still undiscovered, due to the lack of archaeologists. One of these has been nominated to the world heritage, however, due to a deficiency of professional experts in archaeological areas, we are unable to complete the process for submission.

Although many issues have been raised from different countries regarding the preservation of cultural heritage, we must not give up our hope of challenging the odds to preserve our tangible and intangible cultural heritage. We must try and promote sustainable education for cultural diversity to enhance public awareness, that will strengthen our individual roles and maintain efficacy in preserving and protecting our cultural heritage. The Bureaus of Arts and Culture believes that if public educational awareness penetrates into the homes of the poor, the few, the neglected, the natives, we will have conquered our territorial obligation in promoting a diversified cultural heritage. As a young nation, the Republic of Palau, we are inspired by the strong will of our eminent and excellent President, the Honorable Tommy E. Remengesau Jr., as he clearly stated in his first inaugural address, "Preserve the best and improve the rest." This Profound vision he has bestowed on the will of all the Palauan Citizens and the government to ensure that all provisions and regulations shall respect to the integrity of the traditional and cultural heritage of our bounded native land, which has nurtured her people through prehistorical Voyage until the present. In addition, it is indeed a Palauan national concern to strive every day to find ways to restore, protect, reunite, preserve, and thus repossess the traditional and historical heritage of Belau for the future generations to come.

On behalf of the Bureau of Arts and Culture, the Government and the Republic of Palau, I wish to attest the gracious and extensive support that Asian Pacific Cultural Center for UNESCO has bestowed on this tiny country called Belau. It is indeed a great pleasure to express my sincere appreciation of such a program for its well defined goals and objectives to preserve cultural heritage internationally, and thus promote multi-cultural diversity. "Mesulang!"



Palau Bureau of Arts and Culture Report

Loyola Darius

Historic Preservation Specialist

Bureau of Arts and Culture, Ministry of

Community and Cultural Affairs, Palau

Introduction

This is a report on the Republic of Palau for a training course on "Preservation and Restoration of Cultural Heritage in the Asia –Pacific Region 2006", held from August 17 to September 15, 2006, in Nara, Japan. The contents of this report are background information about Palau, and the history of the Preservation Program of Palau, including its present organization, responsibilities and duties. Challenges are also identified in this report.



Geography of Palau:

Palau is the most western island ground in Micronesia, located approximately 7 degrees north of the equator (Fig. 1) and about 700 kilometers east of the Philippines, and about the same distance north of Papua New Guinea. Palau is an archipelago of about 350 high and low islands. The main archipelago consists of a chain of islands which covers an area of 160 kilometers long in the northwest to southeast direction, and 25 kilometers at its widest (Liston 1998). The inhabited islands of Palau include, from north to the south, Ngcheangel, Babeldaob, Oreor, Beliliou, Ngeaur and the Southwest Island group. Most of the islands are encompassed in a barrier reef that stretches for approximately 105 kilometers, except for Ngcheangel islands in the north and Ngeaur and Southwest Islands in the south.

Palau islands are of several geological formations including volcanic, reef, atoll and low platform and high limestone. Babeldaob is the largest island with an approximate area of 333 square kilometers covering about 3/4 of the land area of Palau. At its widest it measures 16 kilometers from east to west by 39 kilometers long, north to south. Babeldaob is a volcanic island that reaches an elevation of 242 meters above sea level.

Climate and Vegetation

Palau has a maritime climate characterized by little seasonal variation. The mean annual temperature is 27 degrees Celsius and there is an average annual rainfall of 3,700 mm. The weather of Palau is divided into dry and wet seasons-the dry season starting from February to April and the wet season from July to December.

Babeldaob is a volcanic island consisting generally of rolling uplands and deep valleys covered with savannas and thick primary growth forests. Dense mangroves cover most of the coastline. The limestone islands vary in elevation from a few meters above sea level to more than 200 meters in height. Atolls have elevations of a few meters above sea level. These are covered with dense stands of mixed tropical forest.

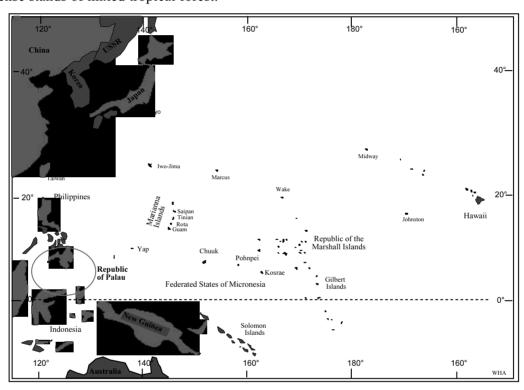


Figure 1. Map of the Pacific Ocean showing the location of the Palau islands.

Pre-history of Palau

Archaeological evidence suggests that Palau was settled as early as 1520-1260 BC (Liston 2005). Another early radiocarbon date of 1000-830 BC was collected at a cave site in Chelechol ra Orrak, one of the rock islands (Fitzpatrick 2002; 2003, Liston 2005). Two dominant archaeological type-sites include step-terraces and traditional villages. Terraces include massive earth sculpting using cut and fill techniques to create step-terraces with associated features such as crowns, ditches, and brims (Osborne 1966; Lucking 1984; Liston 1999; Phears 2004). Terraces began to appear around 400 BC and ceased around AD 1200 (Liston 1999; Phears 2004). Based on different

architectural forms, it has been speculated that some terraces were used for defensive purposes as well as for agriculture, settlement and religion purposes.

Traditional villages contain different types of stone platforms such as odesongel (clan's burial site) and iliud (resting stone platform), stone paths, docks, and paved bathing pools (Osborn 1966, Liston 1999). Traditional villages appeared around 1200 AD and continue up to the present.



Terrace system in Aimeliik state

The first comprehensive documentation of Palauan culture is an account of the Antelope galleon's wreck at Ulong Island in 1783 (Keate, 1793). Palauans were described as having a well-developed social structure and living in traditional villages.

Foreign Administration

In the 1500s a few foreign ships were sighted in Palau but only brief contact was made (Hezel 1983,

PCAA1977). The most significant and impacting contact occurred in 1783 when Captain Wilson's ship, Antelope, was wrecked at Ulong Island, one of the rock islands in Koror. Captain Wilson and his crew stayed in Palau for about three months repairing his ship before sailing back to England. After Captain Wilson's return to England his visit to Palau was widely publicized in European communities and exposed Palau to the Western world.



Spanish Missionaries in Palau

Subsequently, from late 1700s to 1885 many westerners came to Palau looking to trade for items such as trochus shells, dried sea cucumbers, shells, and copra to sell back in their countries. In 1885 the Pope granted Spain the administration of Palau and the rest of the Micronesian islands. The Spanish did not really administer the island. It was mostly Spanish Christian missionaries who came to the islands to convert the local people.

Then in 1899, Germany bought the Micronesian islands including Palau from Spain. The Germans began economic development by opening phosphate mining in Angaur island and encouraged coconut planting for copra production. At that time, many foreigners worked in Angaur with the Palauans. Some of the foreigners who died while in Angaur were buried there.



Phosphate mining in Angaur



Palau Supreme Court, a Japanese Headquarter during Japanese Administration

At the end of WW I, Japan took over the administration of Palau with the rest of the Micronesian islands in 1914. Japanese administration of the islands was more extensive and economic development was expanded to include agriculture, mining of phosphate and bauxite, fisheries, and harvesting of pears. Improvements in education and health were also brought in by the administration.

History of Palau Preservation Program

In 1966, the United States created a law to protect its historical sites. This was called the U.S. Historic Preservation Act, Sections 101 and 106. At the time, Palau was one of the trust territories of the U.S., and all areas under the U.S. were advised to create their own laws to protect their historical sites. In 1974, the Congress of Micronesia created Law 3-34 for all trust territories to create their preservation laws. In 1978, the Sixth Legislature 6-6-18 Cultural Preservation Act was passed. This is

known today as Title 19 Palau National Code Chapter 1. This act created the Bureau of Arts & Culture (BAC) also known as the Palau Historic Preservation Office under the U.S. Preservation Act, Sections 101 & 106. BAC is under the Palau Ministry of Community & Cultural Affairs. The main goal of the BAC is to protect and promote intangible and tangible cultural and historical properties of Palau for the benefit of all. It is funded by the Palau Government and U.S. grants. The Bureau works closely with 16 members of the Palau Society of Historians—all of whom represent the sixteen states that comprise the government of Palau—and with 16 members of the Palau Historical & Cultural Advisory Board.

Organization of the Bureau of Arts & Culture

Currently, the Bureau has the following five sections: Administration, Archaeology/Survey & Inventory, Oral History/Ethnography, Palau Register, and Public Education. The Bureau has a total 13 staff members. Four staff members work for the Administration section, three are working for the Archaeology/Survey & Inventory section, two in the Oral History/Ethnography, two for the Palau Register, and one for the Public Education section. The Oral History/Ethnography section

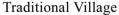
works closely with the Palau Society of Historians, while the Palau Register section works closely with the Palau Historical and Cultural Advisory Board.

The Administration section is responsible for seeking support through grants and donations, and for spearheading special projects. This section is also responsible for creating and building strong cooperation and collaboration with local states and various agencies in order to fulfill its objectives. Other responsibilities include coordinating and organizing major cultural activities such the annual Olechotel Belau Fair. Lastly, this section is responsible for overseeing the overall operation of all program areas.



The Archeology, Survey & Inventory section is responsible for managing the historical sites of Palau, including underwater sites. This section is also responsible for carrying out annual site inventories and for conducting project reviews. Every year the Archaeology team surveys one of the local states and compiles identified cultural historical sites into a database. This section works cooperatively with university researchers, and also works closely with Palau Community College and other schools in Palau in educational and outreach programs for all age groups.







Project Review

The Oral History and Ethnography section is responsible for working to preserve cultural resources. This section works closely with the Palau Society of Historians to ensure their knowledge is recorded and documented. Other responsibilities include the collection of oral

histories and information on identified sites, and also, the codification and publication of oral histories and traditional customary practices.



Palau Society of Historians



Chades er a Mechorei Site Restoration Project

The Palau Register of Historic Places and Development section serves as the official inventory for historical sites and cultural properties. This section is responsible for managing non-renewable and priceless cultural resources. The Palau Historical and Cultural Advisory Board works closely with this section in nomination and registration of highly significant sites for inclusion in the Palau Register. This section also works with developers to protect the historical site, and to interpret cultural resources for the public, and to ensure that restoration projects are undertaken annually.

The Public Education section is responsible for educating the public, and for increasing of awareness on the importance of protecting and preserving Palau's cultural heritage and historic and cultural resources for the benefit of present and future generations. It is also the responsibility of this section to educate the public about the BAC's mission and purpose. Furthermore, it is the role for this section to coordinate with concerned affiliates in planned and ongoing cultural and traditional activities

and events. In 2005, this section started to coordinate an annual symposium with the purpose of building partnership And educating the public of the importance of preserving our cultural resources.



Historic Preservation Symposium 2005

Present Situation and Challenges

Currently, the BAC has identified more than 800 historical sites in Palau. The Palau Register section has registered 148 sites to be protected under Title 19 and has restored 27 registered sites. The BAC has also published 28 books on traditional customs in Palau both in English and Palauan. The BAC continues to organize an annual symposium for public awareness on the importance of cultural resources preservation.

The BAC also faces challenges in implementing Title 19 due to the following reasons.

Lack of local state preservation acts and their enforcement. Palau consists of 16 states, but so far only 12 states have enacted their preservation laws, leaving four states without preservation acts. Furthermore, although most of the states have preservation acts, enforcement of such local legislation is not very effective due to the lack of public awareness.

Lack of quality cultural resources management plans.

Lack of human resources. Palau has rich cultural resources but currently there are only 13 staff members working to identify and document them. This shortage prolongs the process and increases the possibility that much information will be lost, especially since Palau's oral history is retained in the memory of elders who may not be around for much longer.

Lack of funding. Current funds are sufficient neither to pay staff members nor to create more awareness programs or projects.

Lack of equipment such as computers, GPS, camcorders, digital cameras, and iPods for recording oral history. The BAC is really behind when it comes to technology,

Lack of training to improve or upgrade staff skills, such as hands on GIS and GPS training.

Due to all of the challenges listed above, the process of preservation and protection of all cultural resources of Palau has been delayed.

Palau became a member of World Heritage (UNESCO) in 2002. Currently, the BAC is assisting with the nomination of five sites to be added to the World Heritage List. Challenges the BAC faces in implementing nominations for these sites include the lack of professionals for specific tasks, lack of local funds (depending greatly on outside fund, which will prolong the process), lack of a management plan, and also lack of equipment.

Palau archaeological resources are tangible resources that anchor us to the Palau islands and our unique culture. Archaeological features such as odesongel are our birthright left by our ancestors to proclaim ourselves as Palauans and give us control over our land and water, and to give us privileges under our constitution. Our archaeological resources are the testament of our ancestors who have shaped our land and have left us the legacy that has brought us to where we are today. These resources are being threatened and will be gone forever if we do not take steps now to preserve them.

In conclusion, Palau still has a long way to go in its goals for historical and cultural preservation. It has many challenges to overcome, but the BAC has the determination and will to strive to see that Palau's historical and cultural properties are protected and passed on to the next generation. Training opportunities such as this have a great impact on our mission and goals, and Palau is grateful that Japan has invited Palau to participate in this resource training. The skills and methods that are acquired in this training will be beneficial to both our office and our country. We are happy to continue to work together to preserve our cultural heritage.

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IV Lecturer Paper

Report about Preservation and Repair Work on Mrs.Shoen Nakai's Gravestone AMENOMORI Hisateru FUJIWARA Chisa

Report about Preservation and Repair Work on Mrs. Shoen Nakai's Gravestone

Hisateru Amenomori Chisa Fujiwara

1. Introduction

In 2001 and 2002, we conducted the preservation and repair work on Mrs. Shoen Nakai's gravestone placed on the grounds of Seiganji Temple. Initially we planned to conduct repair work while preserving the gravestone as it was. During the preliminary work, however, the monumental inscription on the back of the gravestone was successfully collected that we thought had been lost and there were only few pieces left. It was very difficult to restore monumental inscription in the field because it required complicated procedures for bonding, so we brought it back to the laboratory to continue the work there. We would like to report about the preservation and repair work of the gravestone in the following paragraphs.

2. Present state and condition of deterioration of Mrs. Shoen Nakai's gravestone

Material of the gravestone is sandstone (Izumi sandstone). Izumi sandstone, which is often found in medieval and modern ages, is soft and easy to process and therefore often used as gravestone.

a. State before repair

The following conditions were observed on the gravestone before repair.

- Deterioration was so severe that delamination and scale detachment had occurred on the surface of the gravestone.
- At the bottom of the gravestone, two simple repairs seemed to have been conducted. Those repairs had been conducted by filling defective parts with mortar. However, those repairs ruined the original shape and condition very much. On top of that, materials used for those repairs were different from part to part. Some parts were filled with cement and other parts at the bottom were filled with sand and gravel stones resulting that they were brittle enough to be taken off by hands.
- Cement bonding to the grave foundation conducted by the past repairs was so severely deteriorated that it was not properly bonded.

3. Condition of deterioration before preservation and repair work and the reasons of deterioration

Condition of deterioration on the gravestone before preservation and repair work was as mentioned below.

As aforementioned, on the surface of the gravestone there was delamination occurred that was specific phenomena to sandstone.

The major direct cause to such deterioration may be considered to be rainwater and sunlight. The mechanism is that rainwater gets through the surface and fine cracks and the water is heated by sunlight and swollen to cause major cracks as well as delamination. Also, direct sunlight raises the temperature of gravestone to expand the volume of the gravestone itself. After sunset, it contracts as it cools down. This repetition of expansion and contraction seems to contribute to delamination.

Besides that, chemical corrosion is considered to exist. Sulfur oxide produced by air pollution and existing in the air dissolves in water to become sulfuric acid. This sulfuric acid penetrates into gravestone with rainwater resulting that components of the gravestone such as calcium carbonate are dissolved out and the stone itself becomes collapsed.

The significant deterioration on Mrs. Shoen Nakai's gravestone is as follows;

- (1) Defect due to delamination at the bottom of the front
- (2) Crack on the extreme left on right side, defect on the extreme right, and defect due to delamination at the bottom
- (3) Scale detachment on the entire back and defect due to delamination at the bottom
- (4) Crack on the extreme right on left side and on the entire surface
- (5) Delamination at the top and defect due to delamination

4. Examination of the policy for preservation and repair

Initially, we planned to repair the gravestone in the field. It was because we considered pieces of inscription were seldom left and thus we would have to restore only quite limited part. However, when starting the work in the field and searching around the gravestone carefully during cleaning, we found many pieces which might be a part of inscription. (See Photo 1.)

The restoration of inscription required quite complicated procedures, so we decided that it would be difficult to restore it in the field and proposed to Kaitokudo Kinenkai that we should bring the gravestone back to continue the repair work in our laboratory. The fundamental principles of repairs of cultural properties are to maintain the present state, avoid excessive restoration, and use removable materials so that they can be taken off easily in the future repair project. Because the

gravestone in question is the object to which people are still expressing their faith, we proposed that we should plan to repair it paying attention to its aging history and keeping the present atmosphere so that respect and generosity would be also restored without feeling a sense of incongruity.

Just then on 7th of April, the Kaitoku memorial service was held. We were given a time just before the memorial service started and explained the aforementioned points to Dr. Kawakami and other experts and a resident priest and then proposed the repair policy looking at the gravestone all together in the field. The policy was approved by them.

5. Preservation and repair schedule

1. Photography before repair

The state before repair is to be shot with 35 mm color film or digital video camera for recording.

2. Cleaning

Dust, mud, sand, moss, etc. are to be removed from the gravestone with the use of brush, tweezers, knife, etc.

3. Painting of stone reinforcement agent (Photo 2)

Stone reinforcement agent (Wacker OH100) is to be painted on and impregnated with the weakened gravestone to keep the strength and prevent further deterioration and weakening.

4. Curing for reaction (Photo 3)

Stone reinforcement agent produces chemical reaction just after being painted and raises the strength of the gravestone. It will take about one month to finish reacting and reaction hates moisture like rainwater. Therefore, a temporary shelter is to be constructed to cover it for waiting for the reaction to finish.

5. Taking-over of gravestone

Upon completion of chemical reaction, the gravestone is to be delivered to a laboratory for repair.

6. Removal of filling materials

The filling materials that were added before and would work against restoration are to be removed so as to facilitate reproduction of the original shape.

7. Restoration and repair work

I. Front (Photos 4 and 5)

The front was relatively sound except for defect at the bottom. We applied alpha-cyanoacrylate adhesive to fine cracks for reinforcement. To major cracks we applied epoxy resin for civil construction (Bond K mortar) that was made by mixing natural powdered mineral pigments and controlling color tone and filled the cracks with it in a way not to get people to feel a sense of incongruity. This is how we restored the front.

II. Restoration of inscription on the back (Photos 6 and 7)

a. Assembling

Based on the interpretation of inscription, the location of broken pieces is to be entered on the tracing paper to determine where those pieces should be located. To a block of good collection, alpha-cyanoacrylate adhesive was applied for temporary joint and then how to bond it to the gravestone itself was examined.

b. Bonding

After examining how to bond blocks of pieces to the gravestone itself and checking the concavity and convexity of each block at the last, we bonded them with the use of epoxy resin adhesive.

c. Filling clearance, joint and defect (Photos 8 and 9)

We bonded pieces to pieces and filled clearance between pieces and the gravestone with epoxy resin adhesive and epoxy resin for civil construction. Onto the surface, we applied epoxy resin for civil construction that was made by mixing natural powdered mineral pigments and controlling color tone, in a way not to get people to feel a sense of incongruity. This is how we restored. Actually we repaired by filling joint, clearance between piece and piece and minor defect. However, considering that major defect had been repaired by filling low, we decided to leave it as it was.

III. Left side

The surface of the left side remained as one enter surface and has a clearance of more than 5 mm, that was bonded to the gravestone marginally at one point on the right. So, we removed the outer surface from the gravestone and applied alpha-cyanoacrylate adhesive to the weakened surface of the gravestone for reinforcement, and then bonded the outer surface again with the use of epoxy resin adhesive. With the clearance generated after bonding, we filled epoxy resin for civil construction that was made by mixing natural powdered mineral pigments and controlling color tone, in a way not to get people to feel a sense of incongruity.

IV. Right side

The right side was sound except for crack on the extreme left and defect on the extreme right. So, we applied alpha-cyanoacrylate adhesive to cracks for reinforcement and filled the cracks with

epoxy resin for civil construction that was made by mixing natural powdered mineral pigments and controlling color tone, in a way not to get people to feel a sense of incongruity. Considering that the right-hand defect was one of aging history of the gravestone, we decided not to restore it by filling.

V. Top (Photos 10 and 11)

Pieces had delaminated and there was a clearance between pieces and the gravestone. So, we removed pieces and bonded them again with the use of epoxy resin adhesive. With the clearance generated after bonding, we filled epoxy resin for civil construction that was made by mixing natural powdered mineral pigments and controlling color tone, in a way not to get people to feel a sense of incongruity.

VI. Bottom (Photo 12)

At the gravestone, two repairs seemed to have been conducted and those repairs ruined the original shape and condition as mentioned before. So, we removed weakened and unnecessary deteriorated filling materials, and reshaped with the use of epoxy resin for civil construction. Onto the surface, we applied epoxy resin for civil construction that was made by mixing natural powdered mineral pigments and controlling color tone, in a way not to get people to feel a sense of incongruity.

8. Installation of gravestone

After finishing the repair work, we placed the gravestone again on the grounds of Seiganji Temple. For safety against overturning, we applied epoxy resin for civil construction thinly to the clearance between the grave foundation and the gravestone to stabilize them.

9. Photography after repair

The state after repair was to be shot for recording.

10. Development of report

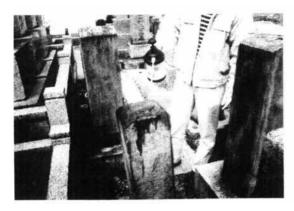
The report indicating materials used for repair and the method of repair are to be submitted.

6. Conclusion

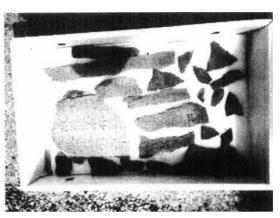
That's it for the preservation and repair work on Mrs. Shoen Nakai's gravestone. Among other stone construction, this time we had to repair the gravestone to which people were still expressing their faith. Ordinary repair for a cultural property usually assumes that it will be placed indoor after repair as one of exhibits and museum artifacts. For the stone construction to be placed

outdoor like this gravestone, techniques for repair have not been fully developed. Through experience in the repair of stone construction, we would intend to work toward the improvement of techniques to repair outdoor cultural properties.

(Gangoji Institute for Research of Cultural Property)



(Photo 2) Painting of stone reinforcement agent



(Photo 1) Collected pieces of inscription



(Photo 5) Front after repair



(Photo 4) Front before repair



(Photo 12) Removal of filling material applied before



(Photo 3) Chamber for curing for reaction



(Photo 7) Back after repair



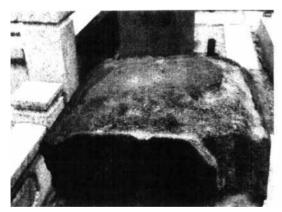
(Photo 6) Back before repair



(Photo 9) Inscription after filling joint and defect



(Photo 8) Inscription before filling joint and defect



(Photo 11) Top after repair



(Photo 10) Top before repair

Final Report

Roland Merar

Introduction

A traditional Palauan saying and commonly spoken by elders and have yet survived from generations to generations and still strongly practiced in the Palauan society is a traditional chants translated into these words, "Before you leave home, take a last glimpse at it and remember it wholeheartedly, so after you decided to come home, you have not forgotten who your are, your identity and how your home land looked like." This olden proverb was used regularly by Palauan natives to teach the Palauan children to be humble, patriots, and martyrs to their mother country. Palauan people in olden days were willing to sacrifice themselves for the love of their land and culture. The current history showed that the last civil war ended in 1800 between Koror state and Melkeok state; the civil war evidently a historical event that showed prove of that Palauan proverb. During those times when young Palauan warriors were preparing themselves for the battle, they perform this traditional chant in their ritual celebration to motivate themselves and also to instill a sense of pride and dignity in their hearts and minds to defend their home land. Although this traditional chant is still being used today, however, its integrity and essence is somehow misinterpreted due to the influence of western civilization culture.

This is a big challenge one has to take to change the concept of Palauan people today and to inscribe the essence of traditional Palauan culture in people's mind in order to keep Palau bounded with her natural, historical and cultural heritage just like before. With this notion, I am grateful that what I have learned from this training will help me in the future to protect and preserve the Palauan cultural heritage just like the old saying, "Remembering your native home land."

Current Situation in Palau

When I embarked Palau in August 15, 2006, I took a final glance at Palau carefully just like the old saying. In lieu of, I saw a beautiful country bounded with bountiful sea, rich in natural magnificence and harness with traditional arts and culture that signify a distinct Palauaness. Her cultural heritage is natural and has been preserved in a humble traditional way through the teachings of her forefathers. However, to foster the other side of Palau for instance, I perceived it as a mixture of modern cultural influence. This new Palauan culture is so overwhelmed with major economic development impact such as infrastructure, buildings – hotels and housings,

unsafe fishing industries, farming, burning, logging, land fills and illegal dump site. Other influencing factor includes administrative issues such as inadequate long-term planning and management plan; lack of public educational awareness on importance of preservation of traditional customs, oral histories, and artifacts in the community; lack of professional expertise to tackle issues related to preservation of artifacts, relics, metals, stones; lack of treatment for artifacts, lack of expertise to promote traditional cultural and historical sites; lack of archaeologist to conduct research and confirm archaeological sites; lack of equipments and tools to investigate and analyze methods and lastly, lack of storage to restore and or preserve retrieved artifacts. With all these challenges in mind I hesitated to come to Japan because I wasn't sure whether this training will benefit me or not. I have to admit that the risk I took for coming to this training has convinced me to change the way the Bureau of Arts and Culture is doing towards the cultural heritage preservation in the future.

Overview of ACCU for UNESCO Training

Based on the information acquired through intense lectures at Nara National Cultural Properties Research Institute also called Nabunken, its administrative roles of archaeological studies is structured systematically to cover all aspects of conservation, preservation and protection of all historical and cultural heritages in Nara Prefecture. The organization system includes experts in zoo archaeologists, who are dealing with the studies of shell middens, and animals and humans bones; Site Investigations Architecture Section, who concentrates on recording of archaeological sites using GPS (Global Positioning System) to determine the location of site; TPS (Total Point Station) to set-up the control point to measure horizontal circle to find X and Y coordinates and also using the Optical Level (Accurate Vertical Reference) to determine the height of the site above the sea level and thus create an on site mapping – topographic view and cross sectional view; Excavation of Archaeological Sites experts who are dealing with digging of the sites, taking artifacts such as stones, potteries, roof tiles, soil, and woods for testing and analysis in the lab; and also Conservation and Development of Archaeological Site who are responsible for maintenance, management, education, remodel and implementation of events and symposium for communities.

On a contrary, is the Gangoji Research Institute who is semi autonomous organization or shall I say, a private institute who also receives its funding from public donors, foundations and or private organization. Such institute is specialized in preservation treatment of unearthed artifacts such as woods, stones and metals object. It has established a well systematic treatment program for preservation of artifacts. The most unique part of the system is applying of different treatment methods in treating woods, metals and stones depending on age, texture and degree of artifacts. The artifacts treated from this institute will be returned to the owner or museum with

recommendations of how to preserve and conserve them.

In comparison with Bureau of Arts and Culture's organization roles, it is quite embarrassing to admit that Palau's Bureau of Arts and Culture needs to do more work on preserving and protecting its cultural heritage by expanding the organization to include more archaeological experts as well as creating its own laboratory to conduct analysis and treatment. Palau also needs to learn different treatment methods in order to preserve the artifacts retrieved from archaeological sites as well as personal and private items donated to the museums its year. Most of antiquities and artifacts excavated have not undergone any forms of treatment for preservation because we lack professional expertise and equipments. However, this training has given me the opportunity to create an ideal management plan to transform the office of Bureau of Arts and Culture to foresee improvement of preservation and conservation system in Palau.

All in all, the Nabunken Research Institute and Gangoji Research Institute has empowered me to propose a comprehensive conservation plan to the Minister of Community and Cultural Affairs to expand the Bureau of Arts and Culture to include experts on zoo archaeology, site recorders and mappers, unearthed artifacts treatment experts on wood, stone and metals, conservation and management plan of archaeological site, public education, community and tourism promotion as well as establishing a laboratory to conduct x-ray and preservation treatment with a storage room to store treated artifacts for preservation and conservation. Such plan will be included in the Bureau of Arts and Culture 5 year strategy plan to be implemented annually staring in July of 2007.

Benefits Acquired from this Training Course

Palau is considered having the best advocacy programs for preservation and conservation of its cultural heritage as to compare to other Micronesians due to adequate number of skilled experts hired under Historic Preservation Office in the United States to conduct archaeological field work, however, it is still far away from what I have explored, learned and experienced in this one month training in Japan through ACCU for UNESCO office.

The impression that I have observed under this intense training depended upon 1) total dedication and coordination of different research institutes working closely to conserve, protect, preserve and promote historical and cultural heritage with in Nara Japan; 2) immense technological assistant network among researchers and archaeology experts to tackle major issues regarding on archaeological findings; preservation and conservation 3) coordination of human development resources among divisions in correspondent to research projects; 4) advanced research methodology and treatment applications used professionally to address all major issues in regards to preservation of Japan's historical and cultural heritage; 5) outstanding support from the Ministry of Education of Japan Government to assist in these research institutes in conducting

archaeological research to improve the cultural preservation heritage of such country; and finally 6) collaborative efforts between community stakeholders to support and safeguard cultural heritage preservation studies. These 6 major issues were inevitably observed all through out the course of this training as most significant approach in dealing with preservation of cultural heritage that I have benefited from.

What I have attest to have given me the opportunity to refine a future management plan of Bureau of Arts and Culture in Palau to reflect on these 6 major issues to improve the scope of work to justify the efficacy of roles and responsibilities to improve Palau's cultural heritage preservation priorities similar to Nabunken Research Institute and Gangoji Research Institute. Both of these institutions have taught me a great lesson to establish a similar programs in Palau to maintain, improve, preserve and conserve historical heritage such as a) conducting archaeological research studies, b) excavation of pre-historical and historical sites and artifacts, c) treatment of artifacts, d) preservation of artifacts, e) conservation and management plan for historical and cultural heritage, f) restoration project of world heritage sites, and g) laboratory system that analyzes a best chemical treatment for preservation of artifacts such as wood, metals and stones. As urgency calls for a change, I intended to implement some of these ideas immediately in Palau despite of what cost it will take.

Conclusion

The ACCU for UNESCO has educated me through various training in different areas of cultural heritage preservation in order to assist Palau in rectifying its administrative roles to preserve and protect the historical and cultural heritage in a long-term goal. It has also given me the opportunity to experience the entire practical application of archaeological processes in planning, excavating, recording, treating, preserving, managing and promoting of historical and cultural heritage. This long cycle of cultural heritage preservation process that I have been exposed to in this course of training takes a lot of money and years in college to acquire. Hence, it was immeasurable assistant of ACCU for UNESCO and its great passion for the world heritage preservation movement, that have urged them to assist this little nation of pacific called Palau to be trained properly in handling and safeguarding of its valuable cultural heritage for future generations to come.

I am most confident today because what I have learned or benefited from this training has given me an opportunity to apply them in Palau. The skills and knowledge that I have acquired will be utilized among the historic preservation specialist in Bureau of Arts and Culture to promote cultural heritage preservation effectively. I am most positive and confident now that decisions that I will make in the future will entail best results of work that will help Palauan historical and cultural heritage from any exploitation, neglect, irrigation and destruction.

In addition, I will also create more programs and hire more appropriate experts to conduct archaeological research to complete interior survey of Babeldaob – Big Island of Palau, and other nominated historical sites, I will establish and implement a collaborative efforts with other agencies such as Belau National Museum, Ministry of Education, Palau Community College and Palau Visitors Authority to work closely to ensure the preservation, the protection, and the promotion of Palauan historical and cultural heritage locally and internationally. I will educate the community to assist in the promotion of multicultural heritage diversity and to register all historic places into Palau Registry of Historic Places, and write a conclusive archaeological management plan to include in a 5 year strategy plan for implementation. I will also work closely with ACCU for UNESCO to inscribe some of Palau's unique cultural properties such as Rock Islands, a natural heritage, Bai, a distinctive traditional men's house, and also a typical terrace, Palau High Chiefs Pyramid, found in the big island of Palau to the World Heritage Registry.

On behalf of Bureau of Arts and Culture which under the Ministry of Community and Cultural Affairs and the people of the Republic of Palau, I would like to extend my utmost gratitude to the ACCU for UNESCO office in Japan and its staff for this training opportunity. What this office has done to me as a government official and Palau representative, a director and historic preservation officer is irreplaceable. The knowledge that I have acquired from this training will help me protect, preserve, conserve and restore tangible and intangible, movable and immovable Palau's own cultural heritage that signifies Palauan identity. After all, the training was extensive, productive and well coordinated.

Loyola Darius

This is a final report of the individual course on Preservation and Restoration of cultural heritage in the Asia- Pacific Region coordinated by the Asian Pacific Cultural Centre for UNESCO (ACCU) in Nara, Japan from August 17-September 15, 2006. This individual training course was provided according to the request of Palau Bureau of Arts and Culture. The focus of this training was on the preservation of bones and relics. The Palau Bureau of Arts and Culture is under the Ministry of Community and Cultural Affairs. Two participants from the Bureau of Arts and Culture were able to attend the individual course training, being the Director of the Bureau of Arts and Culture, Mr. Roland Merar and Ms. Loyola Darius, historic preservation specialist.

This report is based on the observation and experience gained by Ms. Loyola Darius, Historic Preservation Specialist. One of Palau Bureau of Arts and Culture challenges is the preservation of bones and relics. Bones and relics are frequently identified and recorded, but the preservation of these artifacts is still a challenge to the staff of the Bureau of Arts and Culture.

According to the request of Bureau of Arts and Culture, the Asian/Pacific Cultural Center for UNESCO was able to organize a one month individual course of training for the two participants on the following topics:

- 1. Environmental Archaeology
- 2. Observation and analysis of human and animal bones
- 3. Collection, observation and analysis methods for small artifacts
- 4. Introduction to the conservation of metal objects, stone objects and organic remains
- 5. Management methods for folklore materials
- 6. Management and display of museum collections
- 7. Classification, measuring and drawing of archaeological artifacts
- 8. Workshop at the excavation site
- 9. Conservation and utilization of cultural heritage resources

The training was held at different venues, which were:

- 1. Nara Research Institute for Cultural Properties
- 2. Gangoji Institute for research of cultural properties
- 3. Tenri University
- 4. ACCU Building

To evaluate the relevance of this training program to the conservation practices of the Palau Bureau of Arts and Culture, our office has still long way to go. The Bureau of Arts and Culture in Palau is responsible for identifying, recording, protecting and preserving all the intangible and tangible cultural resources of Palau. So far, the Bureau of Arts and Culture has been identifying and recording the cultural resources of Palau, but the preservation and conservation treatment of these cultural resources is a challenge. This training has been a great opportunity to observe and learn the different methods of preserving wood, metal and stone artifacts. We also had an opportunity to learn about environmental archaeology, and introductory courses on archaeological surveying. Another benefit of this training is to help us with ideas that we can use to implement better preservation programs upon our return to Palau.

During this training course I acquired a great deal of valuable information that will be beneficial for the Palau Bureau of Arts and Culture office. On the first week, we were able to learn about environmental archaeology and the different types of screening/sieving methods. This lecture gave us some insight on how we will be able to deal with excavated materials such as shell middens and seeds. Shell middens are usually found at excavation sites that are located at the southern part of Palau. The information on screening and sieving materials such as shell middens and seeds will be very applicable to Palau. We will share this information and the techniques in our office.



Another topic that was discussed in the first week was human osteology. This topic was very interesting and informative. We learned about human bones in detail which were most likely to be found at an excavation site. This lecture developed our awareness about identifying bones and their location during an excavation. During an excavation, we will be able to assist the Palau National Archaeologist in identifying human remains and their location.



The second week of this training was really interesting; we were exposed to different methods and techniques for the conservation of wood, stone and metal artifacts. It is one of the greatest challenges for the Bureau of Arts and Culture. At most times artifacts such as wood, stone and metals are excavated from site and because of lack of preservation techniques, the artifacts are just stored in boxes. With this training on conservation of wood, stone and metals, it has provided some insight for us to handle our artifacts appropriately before we get

specialized conservation treatment. In this way, we are able to preserve the artifacts longer.

The third week of the training we were exposed to classification, measuring and drawing of archaeological artifacts mainly on pottery. This lecture was very valuable information because our office contains many boxes of pot shreds that have not been assembled because lack of specialized assistance. With lecture we are able to gain some perspective on how we are going to

deal with the boxes of pottery shreds. On this third week, we also learned about the recording methods of archaeological sites. The information acquired from this lecture was really important because we learned about the three measurement methods for surveying sites.



The lecture gave us insight to be aware of the archaeological team project or activities. The methods acquired from this lecture seem to very effective, we are aware of the GPS system and plane table survey. Due to lack of funding we do not have equipments such as TPS total stations system. This instrument would be very much needed for the Bureau of Arts and

Culture. Toward the end of the third week we did actual excavation at the Saidaiji Temple. This was a rewarding experience and we were able to excavate and measure the strata using GPS and the Total Station System. During excavation this experience would be applicable in identifying the different points and strata of the site.

Aside from attending classroom lectures, we had field trips to visit two museums. The first museum where we visited was National Museum of Ethnology. At this museum we were able to meet Ms. Into Michiko. Ms. Into has done some research studies of Palau on the Tobi Islands. It was an honor to encounter such a prominent person and also with an interest of the Palau Islands. Ms.



Into shared with us the information regarding storage space for the artifacts, and she made a point that it is important to have a large storage with the appropriate temperature for the artifacts so that we can preserve the artifacts longer.



The second museum where we visited was Tenri Museum. At Tenri Museum, we learned about the management and display methods for museum collections. Information acquired from these two museums are very important because we work closely with the Belau National Museum in Palau, we will be able to share the information about the managing and display methods to our affiliated agency.

During the last week of the training we were able to join the group training for two days. This was a very rewarding experience because we had the opportunity to meet archaeologist, architects and curators from India, New Zealand, Micronesia, Samoa and other Asian Countries. This was a great opportunity to exchange ideas regarding the challenges of conservation and preservation of cultural properties.

Conclusion

During this one month training, I learned a lot of new ideas regarding identification and preservation of bones and relics that will be very beneficial to our office. This training was a very valuable experience. Although, Palau has still a long way to go regarding the conservation of its artifacts and cultural properties, the techniques acquired from this training can be used as some sort of guideline. It will help the Bureau of Arts and Culture in preservation and conservation of many valuable cultural properties and resources.

As a Historic Preservation Specialist for Public Education, one of my tasks upon my return to Palau, is to educate the students about the different field of studies I acquired from this training. Lack of Human Resource is another problem. So I want to educate the students so that they will be aware of many fields of studies related to cultural preservation and conservation.

Acknowledgement

This training has been a successful experience due to the great effort of the following staff. I would like to express gratitude to the Director General of ACCU, Mr YAMAMOTO Tadanao and Mr MORIMITSU Toshihiko. Also I want to give special thanks to Mr YAMASHITA Tsutomu, Mr NAGAI Atsushi, Ms OTANI, Ms KAMIDA and Ms KUROSAWA the interpreter, for the support through out the training. All staff made our stay and training a pleasant one. I would like to thank all the instructors for their time and effort to assist us in this training.

VI Appendix

- 1. List of Lecturers and Interpreter
- 2. List of Staff Members, ACCU Nara

1. List of Lecturers and Interpreter

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