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Introduction: Material Culture Related to Fishing and Boats in Southeast Asia < Special Theme: Material Cultural Studies on Boats and Fishing Tools Based on the Museum Collections and Fieldwork>

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Special Theme: Material Cultural Studies on Boats and Fishing Tools Based on the Museum Collections and Fieldwork

Introduction: Material Culture Related to Fishing and Boats in Southeast Asia

Rintaro Ono*

イントロダクション ---東南アジアの漁撈と船舶に関する物質文化---

小 野 林太郎

This special theme comprises several papers for the past two international workshops and significant outcomes of the Info-Forum Museum Project titled "Maritime Adaptation and Material Culture in Maritime Asia-Based on the Museum Materials from Southeast Asia" (2019-2022) headed by Rintaro Ono. The first international workshop was held onsite at the National Museum of Ethnology, Japan (Minpaku) on 18 and 20 February 2020, just before the worldwide pandemic of COVID-19 occurred. The second was held by online on 27 February, 2021, during the pandemic. The primary purpose of this project is to create an open access database (in Japanese and English) of the Minpaku collections related to human maritime adaptation and culture. We have particularly emphasized materials related to fishing, voyages, and boats in Southeast Asia and Oceania. We also conducted field surveys in the Philippines, Malaysia, and Indonesia to record usage and information related to fishing and boat materials particularly collected by Minpaku. Five papers are also introduced in this special theme.

Key Words: boats, fishing tools, material culture, museum collections, Southeast Asia and Oceania

キーワード:船舶,漁具,物質文化,博物館資料,東南アジア・オセアニア

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本特集は国立民族学博物館のフォーラム型情報ミュージアムプロジェクト 「海域アジアにおける人類の海洋適応と物質文化―東南アジア資料を中心に」 (2019~2021年度,代表:小野林太郎)が2020年2月18~20日,および 2021年2月27日に開催した国際ワークショップで発表された論文と本プロジェ クトの成果を反映した論文5点を収録している。本プロジェクトの第一の目的 は、東南アジア島嶼部を中心とする海域アジアとオセアニアを対象に、人類の 海洋適応に関わる物質文化と認識できる本館所蔵資料の日本語と英語による データベース化とその活用にある。中でも本プロジェクトで注目してきた標本 資料は、東南アジアとオセアニアの漁撈や航海・船舶関連の資料である。さら に本プロジェクトでは、本館所蔵の漁撈・船舶資料に関する使用法や関連情報 の収集を目的とした、フィリピン、マレーシア、インドネシアでの現地調査を 展開した。加えて、現地の専門家による情報提供や学術的な意見交換を実践し てきた。特に、2020年2月に国立民族学博物館を会場に開催した国際ワーク ショップでは、東南アジアから計9名の専門家を招聘し、プロジェクトと密接 に関わる本館の標本資料や東南アジアの博物館資料における保存、あるいは学 術的利用の可能性について発表と議論を展開した。さらに、これら専門家によ る本館資料の熟覧調査により、現存の標本データに欠けている多数の情報を追 加した。本特集では、その中でも特に多くの情報や研究成果を得た漁具・船舶 関連の標本資料とその再評価事例を紹介し、本館が所蔵する標本資料の意義、 また国際ワークショップを含む本プロジェクトの現時点での成果と課題につい て論じる。

- 1 Introduction of the Project
- 2 Southeast Asian Boat and Fishing Tool Collections in the Minpaku
- 3 Contents of the Papers Based on Special Theme
- 4 Ending Remarks and Future Perspectives

1 Introduction of the Project

The objectives of our Info-Forum Museum Project titled "Maritime Adaptation and Material Culture in Maritime Asia-Based on the museum materials from Southeast Asia" are (1) to create a database of the museum collection relating to the maritime culture in the National Museum of Ethnology, Japan (Minpaku), as well as (2) to develop maritime material culture research with international experts from various countries related to the database, thereby strengthening our global networks and partnerships. Under these main objectives, we have completed comprehensive research of Minpaku collections, especially of maritime cultural materials (related to fishing, seafaring, watercraft, and ornaments, etc.) from Southeast Asia and Oceania. Finally, the database was translated into Japanese and English.

As results, 773 materials collected in Southeast Asia including Indonesia, Malaysia, Philippines, Singapore, Brunei, Laos, Thailand, and Vietnam were identified during the first fiscal year of the project (Table 1). Among them, fishing-related materials are 510 in total (Tables 1 and 2). For the project in the second year, we have targeted all materials related to maritime culture collected in Oceania including Micronesia, Melanesia and Polynesia. Over 2,000 materials were counted from Oceania. Among them, the number of collections related to boats and fishing tools in Oceania regions are currently 786 in all (Table 2).

Table 1 Number of Minpaku collections related to maritime culture in Southeast Asia (*n*=773)

Country	Fishing/Boat	Life	Fashion	Religion	Others	Total
Indonesia	135	14	0	7	4	160
Malaysia	106	53	28	15	4	206
Philippines	34	26	0	0	5	65
Brunei	0	1	0	0	0	1
Singapore	2	0	0	0	3	5
Thailand	189	50	2	5	7	253
Vietnam	0	1	0	0	27	28
Laos	43	11	0	0	0	54
Unidentified	1	0	0	0	0	1
Total	510	156	30	27	50	773

(Compiled by the author)

Table 2 Number of Minpaku collections related to boats and fishing tools in Southeast Asia and Oceania

Materials	SEA*	Melanesia	Micronesia	Polynesia	Total
Boats (canoe, variety of boats)		1	5	6	28
Ship Equipment (anchors, paddles, ropes, rudders, etc.)	52	175	32	26	263
Fish-traps (fishing baskets, etc.)		29	8	10	173
Fish-hooks (hooks, lures, longlines, etc.)		101	90	101	232
Other Fishing Tools 1 (nets, spears, spear-guns, etc.)		96	48	9	305
Other Fishing Tools 2 (weights, rods, googles, etc.)		5	6	26	42
Fish boxes (creels, baskets for growing fish)		2	6	4	86
Total		409	195	182	1129

(Compiled by the author) *SEA = South East Asia

In terms of relations between the numbers of related materials and countries in Southeast Asia, the collections from Indonesia, Malaysia, and Thailand exceed those from other SEA countries. Nevertheless, it is surprising that the related materials of maritime culture from the Philippines are rather few in number. Ethnographically, maritime culture including fishing and seafaring is well known,

with reports from the Philippines, and a few related collections from the Philippines in Minpaku. The ethnographical or ethnological importance of the maritime culture in the Philippines seems to attract little interest among Minpaku researchers. Similarly, materials related to fishing and maritime culture from Vietnam are few in the collections. Because Vietnam is blessed with the longest coast of Mainland Southeast Asia, there might be a variety of ethnographic materials, but Minpaku has only one item. Such an imbalance is confirmed. This project is expected to solve the condition to add suitable collections in the near future. However, it is noteworthy that the quality and variety of the Minpaku collections, particularly from Indonesia, Malaysia and Thailand, are significant ethnographic museum collections of the world.

In addition to re-evaluation of the museum database, the representative experts of maritime culture from the National Museum of Malaysia, Muzium Adat (Customs Museum), Universiti Putra Malaysia, the National Museum of the Philippines and University of the Philippines-Diliman support this project and the connections during the first year of the project. Based on these new international networks, the first international workshop at Minpaku was held in February 2020, inviting maritime culture experts from Malaysia, Indonesia, and the Philippines, as well as Japanese experts.

This first international workshop was conducted during 17 and 22 February 2020. There, a total of 14 papers were presented, including two keynote presentations. The 21 scholars partly or fully attending this workshop included eight scholars and museum specialists from Southeast Asia. The affiliations of international attendees include the Research Center for Society and Culture, Indonesian Institute of Sciences (LIPI), Indonesia Maritime Museum, Pusat Arkeologi Nasional Indonesia, Bahari Museum Indonesia, Universiti Putra Malaysia, Department of Museums Malaysia, National Museum of the Philippines, and University of the Philippines-Diliman, whereas those of Japanese attendees were of the Research Institute for Humanity and Nature (RIHN), Nanzan University, National Museum of Nature and Science (Kahaku), Tokai University, Umikobo Production, Tokyo Restoration and Conservation Center, and the National Museum of Ethnology, Japan (Minpaku).

After the welcome speech by Dr. Kenji Yoshida, the Director of Minpaku and the brief introduction of the workshop and project by Rintaro Ono on 18 February morning, both presentation and workshop sessions for investigating and re-evaluation of the Minpaku collections had been held until the 21 February at the garage. The excursion tours to Nara National Museum and The Museum of Oriental Ceramics, Osaka were also held on the 22 February. During the workshop sessions, the participants also experienced the Minpaku materials first hand, in addition to exchange topics and information directly related to the development of database for the second year. Here, all 14 papers were presented. The presenters at this first

workshop are listed below.

- 1. "Palaeolithic Seafaring in East Asia: An Experimental Approach" by Yousuke Kaifu (as keynote presentation)
- 2. "Development and History of Ancient Boats and Ships in East and Southeast Asia" by Jun Kimura (as keynote presentation)
- 3. "Bahari Museum and Indonesian Maritime Tradition" by Firman Faturohman
- 4. "Typology of Plate and Bowl Ceramics Display from the Indonesian Maritime Museum as Underwater Valuable Object from Galasa Strait, Riau Islands, Indonesia" by Andi Handriana
- 5. "Decoration on the Malay Traditional Boat in the East Coast of Malaysia Peninsular: Beliefs and Values" by Mohammad Rohaizat Abdul Wahab
- "The Collection of 'Bangau' (Sail Guard) in Department of Museum Malaysia: A Study of Theme and Content" by Mohd Nasrulamiazam Bin Mohd Nasir
- 7. "The Butuan Boats and the Lashed-lug Boatbuilding Tradition" by Ligaya Lacsina
- 8. "The Highlights of Underwater Archaeological Sites and Maritime Cultures in Indonesia" by Shinatria Adhityatama
- 9. "Fishing Culture in Sumbawa Island: A Holistic View" by Dedi S. Adhuri
- 10. "Maritime Culture in Maritime Asia and Oceania: Collections of Maritime Culture Museum in Okinawa" by Akira Goto
- 11. "Fishing and Maritime Culture in Southeast Asia" by Tomoya Akimichi
- 12. "Video Presentation related to Fishing and Boat Building in Southeast Asia" by Osamu Monden and Kyoko Miyazawa
- 13. "An Overview of Artisanal Fisheries in the Philippines: Local Knowledge and Material Culture Studies" by Cynthia Neri Zayas
- 14. "Tsunami Disasters and its Affects to Maritime Culture in Indonesia" by Isamu Sakamoto

The second international workshop titled as "Fishing and Material Culture in Maritime Asia" was held on 18 February in 2021 online under the COVID-19 pandemic situation in the world. Basically, the workshop was planned to be held onsite at the National Museum of Ethnology in Osaka again. With many inconveniences under the pandemic situation in each country of the project member and as online environment including time lags, the workshop was held as a half-day session mainly with presentations and discussions. At this workshop, five papers were presented, including a keynote presentation. In all, 20 scholars and Ph.D. students partly or fully attended this workshop, including 7 scholars and museum specialists from Southeast Asia. The affiliations of international attendees included the University of London, Research Center for Society and Culture, Indonesian Institute of Sciences (LIPI), Indonesia Maritime Museum, Pusat Arkeologi Nasional Indonesia, Bahari Museum Indonesia, Universiti Putra Malaysia, Department of Museums Malaysia, National Museum of the Philippines, and the University of the Philippines-Diliman, whereas the Japanese attendees were of Tokai University, Umikobo Production, Tokyo Restoration and Conservation Center, the Graduate University for Advanced Studies, and Minpaku. After the introduction and reports of the project outcomes and progress by Rintaro Ono, five papers were presented. The respective details, including the titles and presenters, are presented below.

- 1. "Mapping Philippine Maritime Culture through Digital Environments" by Christina Juan (as keynote presentation)
- 2. "A Study on the Characteristics of the Malay Traditional Boat: *Kolek Buatan Barat*" by Mohammad Rohaizat Abdul Wahab
- 3. "Bird Boats in East Coast: An Analysis Aspects of Culture Heritage" by Mohd Nasrulamiazam Bin Mohd Nasir
- 4. "Fishing Culture in Sumbawa and Indonesia: A View from Cultural System" by Dedi S. Adhuri
- 5. "An Overview of *Bubu*, its Malayo-Polynesian Links, and Possible Origins" by Cynthia Neri Zayas

Among these five papers, the first presentation by Christina Juan of Philippine Studies at SOAS, University of London was a detailed introduction of the digitalized database project of the overseas museum collections related to the Philippine materials including maritime culture. The title of the project was "Mapping Philippine Material Culture in Overseas Collections ca. 1500–1900" (https://philippinestudies.uk/mapping/). Juan is a head of this project. As a similar

project to that of Info-Forum Museum Project of Minpaku, the detailed information and collection list of this digitalized project are particularly provocative and useful for the development of our project. It is also expected to be important to expand our connection and networking with these similar museum collection projects and digitalized projects overseas. The four other papers were all presented by the same speakers of the first workshop and members of this project. Some of them were selected for inclusion in this special theme.

Finally, in terms of the museum collections related to maritime culture in Southeast Asia and Oceania, the past two workshops specifically emphasized boat and fishing tool materials in Insular Southeast Asia including Indonesia, Malaysia and the Philippines. With such a background, this special theme includes five articles related to this topic based on the past two workshops. Herein, after briefly reporting and discussing our re-evaluation of both boat and fishing tool collections in Minpaku, the contents of this special theme are introduced.

2 Southeast Asian Boat and Fishing Tool Collections in the Minpaku

This special theme mainly emphasizes museum collections related to boats and fishing tools in Southeast Asia. Therefore, the current results of our Info-Forum Museum Project are introduced here to present some details of both boat and fishing tool collections from Southeast Asian region in Minpaku. Related to the boat materials, there are 16 boat collections originally from Southeast Asia in Minpaku (Table 2). These boat collections are all from Malaysia (n=4), Indonesia (n=5), and Thailand (n=7). Not one originates from another country of Southeast Asia.

Table 3 presents details of these 16 boat collections based on our original database. The boats collected in Thailand including a rowboat, a dugout canoe, a boat with dragon canoe, three mud sleds, and a Kolek/Kolae boat. They were all purchased during the 1960s and 1980s. Among them, a dugout canoe collected by Keiji Iwata in 1961 and three mud sleds collected by Takeharu Kawaoka in 1968 constitute the previous collection, which belonged to the Hoya Museum and Attic Museum in Japan. They were donated to Minpaku, whereas other boats after 1974 were originally collected by the Minpaku scholars. The Kolek/Kolae boat collected by Shigeharu Tanabe in Takbai, Narathiwat Province of Southern Thailand (H0125529) and three mud sleds (called *menachar* or kuk rawa in Malay) collected in Tanjung Lulo in Pattani Province, Southern Thailand (H0095440, H0095441, H0095465) are actually equivalent to Malay traditional boats because there are many Malay migrants to the eastern coast of southern Thailand (Coatalen 1982; Firth 1946; Wahab and Ramli 2020). Therefore, it is natural to regard these boats as a Malaysian boat collection rather than of Thai boats. Based on this understanding, the Malay or Malaysian-related boats in Minpaku are eight in all and constitute the largest boat collections from the Southeast Asian region.

 Table 3
 List of boat collection from Southeast Asia at Minpaku

Inventory Number	Object Name	Synonym	Local Name (language)	Collector	Year of collection	Place of collection
H0000315	rowboat, sampan	boat, ship	RнA PHAI (Thai)	Komei Sasaki	1974	Samngam village, Dontum, Nakhon Pathom Province Central Thailand
H0002153	boat with dragon head	boat, ship	RUA HUA NAK (Thai)	Naomichi Ishige	1975	Saraphi, Chiang Mai Province Northern Thailand
H0125986	boat	boat, ship	RUA KLON (Thai)	Shigeharu Tanabe	1985	Tha Wang Tan Village, Saraphi, Chiang Mai Province
H0095440	mud sled (for shrimping net)	boat, ship	KUKU RAWA (Malay)	Takeharu Kawaoka	1968	Tanjung Lulo Village, Pattani Province, Southern Thailand
H0095441	mud sled (for shrimping net)	boat, ship	KUKU RAWA (Malay)	Takeharu Kawaoka	1968	Tanjung Lulo Village, Pattani Province, Southern Thailand
H0095465	mud sled	boat equipment	MENACHAR (Malay)	Takeharu Kawaoka	1968	Tanjung Lulo Village, Pattani Province, Southern Thailand
H0125529	Kolek/Kolae boat	boat, ship	KOLEK/ KOLAE (Malay)	Shigeharu Tanabe	1984	Phraiwan village, Takbai, Narathiwat Province, Southern Thailand
H0172895	boat for circumcision ceremony	Petala Indera boat, rite, ceremony, rituals, ship	PERAHU (Malay)	Takashi Sugishima	1990	Trengganu, East coast of Peninsular Malaysia
H0000910	dugout canoe (for burden carrying)	boat, ship	_	Keiji Iwata	1961	Long San Longhouse, Sarawak Northwestern Borneo Malaysia
H0198269	houseboat	boat, ship	LEPA-LEPA (Bajau/Sama)	Koji Sato	1994	Air village, Semporna, Sabah, Northern Borneo, Malaysia
H0198266	dugout canoe	boat equipment	BOGOH- BOGOH (Bajau/Sama)	Koji Sato	1994	Labuan Haji village, Bumbum Island, Semporna, Sabah, Northern Borneo, Malaysia

Inventory Number	Object Name	Synonym	Local Name (language)	Collector	Year of collection	Place of collection
H0165601	canoe	boat, ship	JARO PENGANYOH, SAMPAN DAN PENGAJUH (Indonesia)	Shinobu Yoshimoto	1989	Acheh Besar, Indonesia
H0165603	canoe	boat, ship	JARO PENGANYOH, SAMPAN DAN PENGAJUH (Indonesia)	Shinobu Yoshimoto	1989	Acheh Besar, Indonesia
H0198345	fishing boat (Madura's public ship)	boat, ship	EDER OR IJO- IJO (Indonesia); flag: BENDERA tassel: LOR ULOR	Koji Sato	1994	Camplong, Sampang, Madura Island, East Java, Indonesia
H0202262	outrigger canoe, boat	boat, ship	_	Shota Fukuoka	1995	Bali, Indonesia

(Compiled by the author based on the database of the Info-Forum Museum Project in the Minpaku)

Regarding other boats collected from Malaysia and Indonesia, a dugout canoe collected in Sarawak state in Northern Borneo, Malaysia (H0000910) and another dugout canoe collected from Toba in Sumatra, Indonesia (H0004266) are currently the only boats exhibited at the permanent exhibition of Minpaku. The houseboat of the Bajau (or Sama) people known as *Lepa-Lepa* (H0198269), which has been used mainly in the Sulu Islands and northern Borneo (Sather 1997), was once exhibited at the corner of Southeast Asian section and outside of the hall as cut in half. Additionally, the fishing boat of Madura Island in East Java, Indonesia (H0198345) was exhibited outside of the exhibition hall and in open air. However, this Madura boat and the half of the *Lepa-Lepa* boat (stern side) which was exhibited outside became degraded rapidly. These boat collections are currently in storage. All other boats collected from Malaysia and Indonesia are currently stored at the boat repository in Minpaku.

Among them, two Malay boats at the repository were remarkable during the first international workshop on February 2020. One is a *Kolek/Kolae* boat (H0125529) collected in southern Thailand but originally made and used by Malay migrants (Photo 1), whereas another one is the so-called *Petala Indera* boat (H0172895), which was purchased at an antique shop in Kuala Terengganu in 1990 and which was originally built in the 1950s and used in Terengganu state on the eastern coast of the Malay Peninsula, according to the shop owner. Both Malay boats are beautifully made. Similar boats are known as important boats ethnographically and culturally in Malaysia, although our information in the original database



Photo 1 The Kolek/Kolae boat stored in the Minpaku repository (Photo by the author, 2020)



Photo 2 Petala Indera boat stored at the Minpaku repository (Photo by Manami Aoki, 2020)

is very limited. For such reasons, Mohammad Rohaizat Abdul Wahab and Mohd Nasrulamiazam Bin Mohd Nasir, who participated to the workshops from Malaysia and who are also known as specialists of Malay boats, investigated these boats in Minpaku and also conducted their surveys in Malaysia. Their research and investigation outcomes are reported for presentation of this special theme.

In terms of all materials related to fishing in Southeast Asia, the materials identified as fish traps, the number of fish-basket traps (n=139), is higher than for other materials (Table 4). Considering each number by country, the Thailand materials are the most numerous (n=46) followed by those from Malaysia (n=30) and Laos (n=29). For the materials related to fishing in mainland Southeast Asia, the

Minpaku collections consist only of the Thailand and Laos materials currently. For the case in Insular Southeast Asia, the Minpaku fish-trap collections consist of materials from Malaysia, Indonesia, and the Philippines. Among them, the fish-traps from the Philippines (n=13) are the fewest, although they frequently appeared in ethnographic accounts as bubo. Based on that fact, Zayas reviewed the ethnographical records of fish-traps in the Philippines and analyzed the Minpaku collections. Another report by Takashi Tsuji specifically described the ethnographical use of fish-traps in Lao PDR and also in Minpaku collections.

Table 4 List of Minpaku collections related to fishing in Southeast Asia

Materials	Thailand	Indonesia	Malaysia	Laos	Philippines	Singapore	Others	Total
Fish-traps (fishing basket, etc.)	46	21	30	29	13	0	0	139
Fish baskets (creels, baskets for keeping fish in alive)	31	17	6	11	13	0	0	78
Fish-hooks (hooks, lures, longlines)	31	3	2	0	0	0	0	36
Other Fishing Tools 1 (*1)	45	63	40	3	6	1	0	158
Other Fishing Tools 2 (*2)	15	6	8	0	2	0	0	31
Boats	7	5	4	0	0	0	0	16
Boat Equipment (*3)	14	20	16	0	0	1	1	52
Total	189	135	106	43	34	2	1	510

^{*1 =} nets, spears, spear guns, etc.; *2 = weights, rods, googles, etc.; *3 = anchors, paddles, ropes, rudders, etc. (Compiled by the author based on the database of the Info-Forum Museum Project in the Minpaku)

Considering other materials related to fishing in Southeast Asia, the number of fish baskets, which include creels and baskets for keeping fish alive mainly made of plant materials such as bamboo and rattan are secondly numerous among them (n=78). These fish baskets are fundamentally similar to fish traps made of plant materials. Fish-hooks include single hooks, lures, and long-lines. Most of the Minpaku fish-hook collections are from Thailand (n=31). A variety of fish-hooks are also known to exist in Indonesia, Malaysia, and the Philippines ethnographically, although the numbers of items in these collections remain very limited at Minpaku. By contrast, the number and variety of fish-hooks from Oceania regions is high in the Minpaku collections (Table 2). The category of Other Fishing Tools (1) includes fishing tools such as nets, spears, spear guns and others, which are major fishing tools. The category of Other Fishing Tools (2) includes fishing tools of several kinds such as weights, rods, goggles and other items that are used mainly as supplementary tools for line fishing, net fishing, and dive fishing. Lastly, materials related to boats and boat equipments are also included. Boat equipment includes anchors, paddles, ropes, rudders, figure-heads and others used as part of boats. Among them are four figure-heads (known as Bengau/Bangau) of the Malay traditional boats including Kolek/Kolae boats in Minpaku (Photo 3). Because these



Photo 3 Four *Bangau* materials in the Minpaku collections (Sources: 1, 3, 4: from the Minpaku museum database; 2: photo by the author, 2021)

figure-heads are also attached to the boats, a study described by Mohammad Rohaizat also investigates them.

3 Contents of the Papers Based on Special Theme

This special theme consists of the five articles with this introduction. All of these five articles are based on the research outcomes presented at two international workshops and for our Info-Forum Museum Project. Among them, the three articles specifically examine and discuss boat materials in Malaysia and the Philippines, whereas two other articles describe the investigation and analysis of fish-traps in the Philippines and Laos, including our Minpaku collections.

The first article by Mohammad Rohaizat Abdul Wahab presents his ethnographic study of *Kolek/Kolae* boats used by Malay fishermen along the eastern coast of the Malay Peninsula, particularly in Kelantan state. The *Kolek* boat is a traditional Malay boats. He found that they are still built and used widely in areas including the eastern coast of southern Thailand (Firth 1946; Wahab and Ramli 2020). The structure and design of these boats as well as the traditional boatbuild-

ing methods and painting skills are recorded in this paper in detail. Rohaizat investigated the names and functions of the major parts of the *Kolek* boat. His article also discusses the future of *Kolek* boats and the building technology for conservation, as well as the significance of the *Kolek* boat (Photo 1) and several *Bengau/Bangau* materials (Photo 3) stored at the Minpaku.

The second article by Mohd Nasrulamiazam Bin Mohd Nasir reviews and discusses the *Pertala Indera* boat, or, as it is known, the *Garuda* or bird boat, which is known as the traditional watercraft with a close relation to Malay historical culture in the Kelantan state of the eastern coast of the Malay Peninsula (Coatalen 1982). One of the *Pertala Indera* boat materials is stored at the Minpaku repository (Photo 2) (H0172895). Similar Pertala Indera boat collections are located at the five museums in Malaysia including the National Museum of Malaysia in Kuala Lumpur. Further investigation by Nasrulamiazam confirms the strong possibility that all of these boats were built by the same craft worker: a man who passed away in the 2000s. Other information from the informant he interviewed in Malaysia suggests that these *Pertala Indera* boats, including that of the Minpaku collection, were all built in Kelantan state during the 1980s. This new information differs from our original museum database and information mainly obtained from the shop owner at Kuala Terengganu in 1990. With such new investigation of the Minpaku collection, he reviews details of the history of Pertala Indera boat tradition since the early 20th century and discusses how Garuda Pertala Indera boats became important ceremonial boats related to circumcision ceremonies, and royal boat in Kelantan. However, it is noteworthy that the small *Pertala Indera* boats now located at the four museums in Malaysia and also at Minpaku might never be used for such ceremonies because they were built in Kelantan as model boats.

The third article by Ligaya Lacsina reports and discusses the Butuan boat of the Philippines. Butuan boats are well-known as a National Cultural Treasure in the Philippines: the prehistoric boat was excavated from archaeological sites in Mindanao, a southern part of the Philippine archipelago. The Butuan boat was first excavated in the 1970s by looters. Currently, it is the oldest watercraft in the Philippines, dated between the 4th and 12th century (e.g., Abinion 1989; Bautista 1989; Clark et al. 1993). Since 1976, at least 11 Butuan boats have been found at archaeological sites. In fact, seven sites have been conserved. Three boats (Butuan boat Nos. 1, 2, and 5) have been recovered by local museums for exhibition or conservation purposes (the numbering of boats is based on the museum record). Butuan boats (Nos. 1 and 5) are now exhibited at the Butuan Archaeological Park. Butuan boat 1 is exhibited on the top of a metal cradle, whereas Butuan boat 5 has been covered with brown paper and plastic for preservation. Butuan boat 2 was first exhibited at the National Museum of the Philippines in Manila, although they were dismantled in 2013. Lacsina argues that the current difficulties of conservation and exhibition of these fragile prehistoric boats in museums underscores the importance of maintaining the remains in an anaerobic environment.

The fourth article by Zayas provides a detailed ethnographical review of fishtraps (bubo) in the Philippines, including her own study outcomes and analyses of the fish-traps of the Minpaku collections. Zayas first argues that bubo is the most pervasive device in the Philippines. She found information about the following: a) reliability of bubo technology in time and space, b) knowledge and skills of the fishermen from generation to generation, and c) environments in which to conduct trapping, such as rivers, lakes, streams, and oceans. In many countries of Asia and Oceania, trap-fishing including bubo is mainly practiced by peasant fishermen. This aspect is the most significant of the fishing material culture. Therefore, fish traps should be important for ethnological or anthropological studies among fishing and farming communities, especially in Southeast Asia, including the Philippines. After reviewing ethnographic records of the 1930s-1950s (e.g., Sphoer 1986; Umali 1950), she concludes that future study is needed to elucidate the ethnography of bubo trapping, with consideration of how knowledge of artisans is to be shared.

The final article by Tsuji also specifically describes fish traps. His targets are materials from Lao PDR as mainland Southeast Asia. Fishing in Laos is fundamentally conducted by farmers in paddy fields and rivers. Therefore, fish traps are important fishing gear among the farmers; various fish traps are used. Based on that understanding, he investigated characteristics of fish traps found in the Mekong Basin in southern Laos during his fieldwork in 2008-2009. He recorded 12 fish traps classified into two morphological types: open-weave upright basket traps and horizontal cylinder traps made of bamboo. With his observation study about the use and morphological analysis, he also specifically examines the Lao fish trap collections of the Minpaku from a viewpoint of eco-material culture. From this investigation and analysis, he confirmed 24 fish trap collections at Minpaku, produced mainly around the 1980s-1990s, and mostly in southern Laos. Half were made of rattan. His comparative analysis revealed several similarities of the structure and function beyond time and space. With such results, he presents discussion of how Lao farmers have used natural resources, especially terrestrial plants and aquatic animals, for their basic subsistence in their given ecological environment. Tsuji has engaged in our Info-Forum Museum Project since 2020 and has worked on editing the new database including Laos materials. In these contributions, his study would combine his fieldwork. The related Laos collections of Minpaku are significant as a special theme.

4 Ending Remarks and Future Perspectives

The past two international workshops held through our Info-Forum Museum Project focus on material culture and museum collections related to maritime culture and fishing in Southeast Asia. Through the discussions and presentations, we exchanged updated information about the collections in several museums in Indonesia (Museum Bahari, Indonesia Maritime Museum), Malaysia (National Museum of Malaysia), the Philippines (National Museum of the Philippines) and Japan (Maritime Culture Museum in Okinawa, National Museum of Ethnology, Japan), and confirmed the importance of museum database with sufficient and detailed information as well as the methodology for the conservation and exhibition of museum collections. Because most boat and fishing tool collections include plant materials, the control of room/storage temperature, humidity is fundamentally important, especially in tropical environments in Southeast Asia. Particularly, such cases as the prehistoric boat materials such as the Butuan boats face risks of further damage. Rapid action to protect these museum collections is required.

For the museum collection database, we all agree that integration of detailed ethnographic (and archaeological) information is essential. This special theme is the first outcome of our progressing work. For upgrading the Minpaku database both in English and Japanese, we added 23 items to the basic database list (Table 5). In

Table 5 Basic database list of the Info-Forum Museum Project 2019–2021

Item No.	Japanese	English
1	標本番号	Inventory number
2	標本名	Object name
3	標本名 (類義語)	Object name (synonym)
4	現地名 (言語)	Local name (language)
5	収集者	Collector
6	収集年	Year of collection
7	収集地	Place of collection
8	製作地	Place of production
9	使用地	Place of use
10	使用民族	Group
11	民族(他の民族名称)	Ethnonym
12	製作年代・状況	Notes associated with collection/accession
13	用途・機能	Usage and function
14	材料	Materials
15	計測値	Dimensions
16	資料説明	Object description
17	備考	Remarks
18	フォーラムコメント	Additional notes from the forum
19	文献	Reference
20	OCM	OCM
21	OWC	OWC
22	データベースへのリンク	Link to database (Info-Forum Museum)
23	他機関へのリンク	Link to other museum collections

(Compiled by the author based on the database of the Info-Forum Museum Project in the Minpaku)

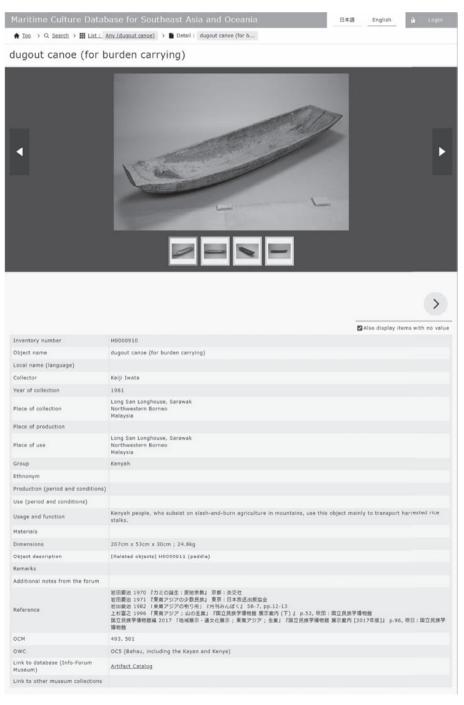


Figure 1 Example of the demonstration version of the Open Access digitalized database (Maritime Culture Database for Southeast Asia and Oceania) by the project

relation to the Info-Forum Museum Project, item Nos. 18, 22, and 23 are newly added to the original database. It is one point of significance for the new database created by the project.

The demonstration version of the open access database has been active and developed since 2020. It currently covers 2,938 collections from Southeast Asia, Melanesia, Micronesia, and Polynesia. The project and workshop members currently can access the digitalized database and can freely add comments (see Figure 1). Our project staff are also adding more information to item Nos. 16, 17, and 19. The outcomes of the first workshop, in which all specialists and participants from Southeast Asian countries directly investigated and checked the Minpaku collections, are mainly reflected in item 13 (usage and function) and 14 (materials). In the original database of the Minpaku collection, the item about materials is found, but most of them are blank, with no identification of material(s). To resolve such shortcomings and to develop our database, we have strived to add more information about usage, function, and material(s) of each collection by conducting direct inspection and perusal of the collections in the Minpaku.

Another target of our project is to complete the open access database of the collections from regions of Oceania. As shown in Table 2, the number of Minpaku collections related to boats and fishing tools from regions of Oceania is actually greater than the total number of materials from Southeast Asia. These Oceania collections are also important for our project. Currently, we are preparing and completing a new database of these Oceania collections covering Melanesia, Micronesia, and Polynesia. The final version of our open access database will cover the Oceania and Southeast Asia regions together. The Open Access database (Maritime Culture Database for Southeast Asia and Oceania) of our Info-Forum Museum Project will be opened to the public during this year (2022). The thematic exhibition (Title: Maritime People and Art of Their World: Material Culture in Southeast Asia and Oceania) based on the project will also be held during September and December 2022. Based on these outcomes of our Info-Forum Museum Project, we also plan to increase our museum collections related to fishing tools and boats both from Southeast Asia and Oceania while conducting ethnographic research exploring boat building and fishing in these regions.

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