

FY2021 Annual Report for International Joint Research with Research Fund
International Joint Digital Archiving Center for Japanese Art and Culture (ARC-iJAC),
Art Research Center, Ritsumeikan University

Date (year/mm/dd): _____

1. Title of the research project	
Digital Database and Visualization of Borobudur Maritime Landscape and Japan-Indonesia Maritime Connection	
2. Research leader	
Name	Organization and title
Fadjar Ibnu Thufail	National Research and Innovation Agency
3. Co-researcher (Total:9 persons)	
Name	Organization and title
Satoshi Tanaka	Ritsumeikan University Professor
Keiko Suzuki	Ritsumeikan University Professor
Liang Li	Ritsumeikan University Associate Professor
Kyoko Hasegawa	Ritsumeikan University Lecturer
Jiao Pan	Ritsumeikan University Graduate Student
Upik Sarjiati	Indonesian Institute of Sciences Researcher
Firman Budianto	Indonesian Institute of Sciences Young Researcher
Sugeng Riyanto	Yogyakarta Archaeology Office Director
Brahmantara	Borobudur Conservation Office Researcher

4. Overview of the research project (about 150 words). Note: If you have changed your project since the time of application submission, please write clearly where you made changes.

This proposed project is part of a broader and long-term initiative of the ARC-LIPI (now BRIN) collaboration to create digital archives and visualization of the ancient Japan-Indonesia transoceanic relation. We will use digital recording technology to create chronological databases and layered visualizations of sites, artefacts, and documents to trace the history of maritime connections between sites in Indonesia and Japan in the 9th-17th century AD. In this FY 2021 we will make high-quality and transparent 3D digital reconstructions of ancient maritime transportation artifacts found in Central Java and Sumatra. We will also begin to collect information, digitize, and create archival database of Japan-Indonesia maritime expeditions in the 9th-17th AD. This project extends the ARC-LIPI project collaboration on digitizing Borobudur, and in the FY 2021 we will focus in more detail at visualizing relief elements related to maritime transportations and ecologies. We expect the visualization and the archival database provides scientific information to understand the historical maritime connection between Japan and Indonesia as part of the UNESCO's Cultural Routes.

5. Overview of the research results. Note: We may use this section for the Center's PR.

The implementation of fieldwork activity of the project in 2021-2022 has been affected by two major factors:

- 1) Materials unavailable to be scanned. When excavation of the boat completed, the boat was dismantled to be transported to a small museum. However, the proses of dismantling and transportation were very sloppy, resulted in many important parts of the boat missing or destroyed. The ropes, that was going to be the major target of scanning and transparent visualization, were missing, and also some central planks.
- 2) The Covid situation in Indonesia in 2021-2022 had increased significantly. Fieldwork travel has become a risky activity. Many intercity travels were suspended and the Indonesian government issued a regulation to ban out of town business for all government employees, research team included.

The above factors have made fieldwork research and photogrammetry recording are impossible to carry out. Therefore the major research activities in 2022 have been a series of webinar to discuss the maritime connection between Japan and Indonesia. The webinars are:

- 1) "Japanese Fishing Activities in the Collective Memories of Sangihe and Talaud Fishermen"

Alex Ulaen
Maritime and Indigenous Research Center, Manado

This talk explores collective memories of Japanese fishing techniques in Sangihe and Talaud. The Japanese techniques of catching fish with funai and muroami and processing katsuobushi existed in North Sulawesi since 1927 but no longer practiced by local fishermen. This talk will show how the memories of the fishing techniques can help us learn the historical relationship and cultural exchange between Japanese and North Sulawesi fishing traditions.

- 2) "Indonesia in Ceramics Trade in Asia"

Takashi Sakai
National Taiwan University

Indonesian had been an important connecting region in the ceramic trade across Asia. The webinar discusses three trading networks: 1) Dhow ship trade (9-10 AD) that brought Changsa ceramic; 2) Cham and Gujarati networks (15 AD) that brought Vietnamese ceramic; and 3) Taiwanese Zheng trade (17) that brought Hizen and Anping ceramics.

- 3) "Punjulharjo Boat: Indonesian and Southeast Asian Traditional Boat Building"

Agni Mochtar
National Research and Innovation Agency

This talk discusses the history, technological aspect, and future development of Punjulharjo boat, a seventh century C.E. wooden vessel found on the north coast of Rembang, Central Java, Indonesia. This boat represents the lashed-lug tradition, one of the traditional boat buildings in Southeast Asia. This type of watercraft was used for maritime activities in the Southeast Asian waters and beyond, making it an important part of the regional maritime network.

4) “From Okinawan People’s Tombs in Bitung to Indonesian Community in Oarai”

Makoto Ito

Emeritus Professor, Tokyo Metropolitan University

A few Japanese people’s tombs have been found in Bitung (North Sulawesi). This webinar chronicles the arrival of Okinawans who came and settled in Bitung. The relationship between North Sulawesi and Okinawa was severed during the World War II, and currently the relationship has re-emerged in the form of kenshusei. This webinar also discusses the life of Minahasan people in Oarai.

6. Research activities

(1) Books

- Title; date of publication; publisher; names of co-authors and editors, if any; and page numbers.

(2) Articles

- ”Article title”; date of publication; publisher; name of journal; volume number (issue); names of co-authors, if any; page numbers; and peer-reviewed or not.

(3) Presentations

- ”Presentation title”; date; conference name; venue; names of the co-presenters; and peer-reviewed or not.

(4) Symposiums and/or research meeting you organized

- ”Name of symposium/meeting”; venue; date; number of participants; names of co-organizers (institutions), if any.

(5) Other research activities (Lectures to the general public, and appearances in/contributions to mass media)

- Achievement; venue; and date.

(6) Academic awards

- Granting institution; name of award; title; and date awarded.

(7) Grants-in-Aid for Scientific Research -KAKENHI

- Research title; type of grants programs; starting year-ending year; and principal investigator or not.

(8) Competitive grants other than KAKENHI

- Research title; granting institution; grant name; starting year-ending year; and principal investigator or not.

(9) Other achievements