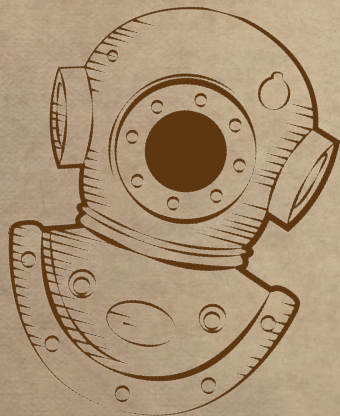
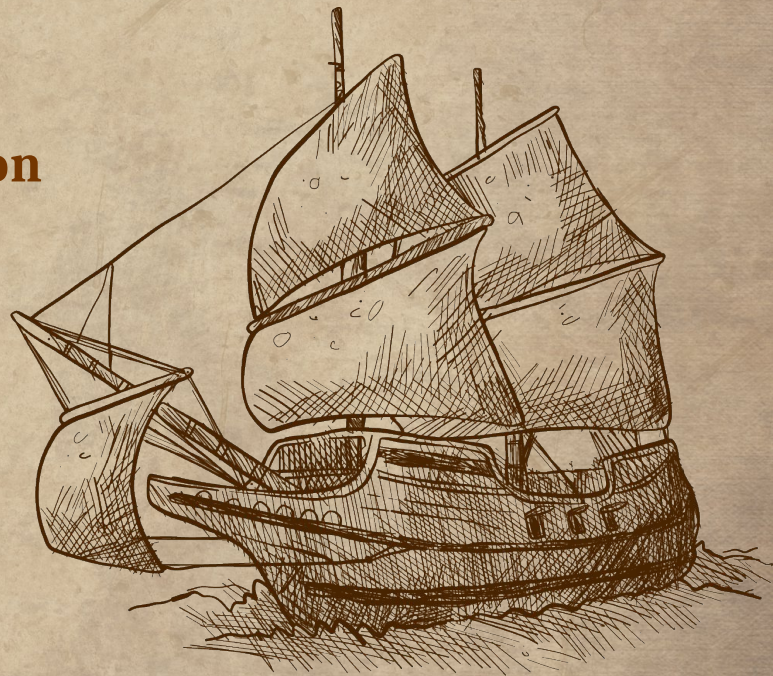


Digital Database and Visualization of Borobudur Maritime Landscape and Japan-Indonesia Maritime Connection

Fadjar I. Thufail

Collaboration:

- Indonesian Institute of Sciences
- ARC Ritsumeikan
- Yogyakarta Archaeological Office
- Borobudur Conservation Office

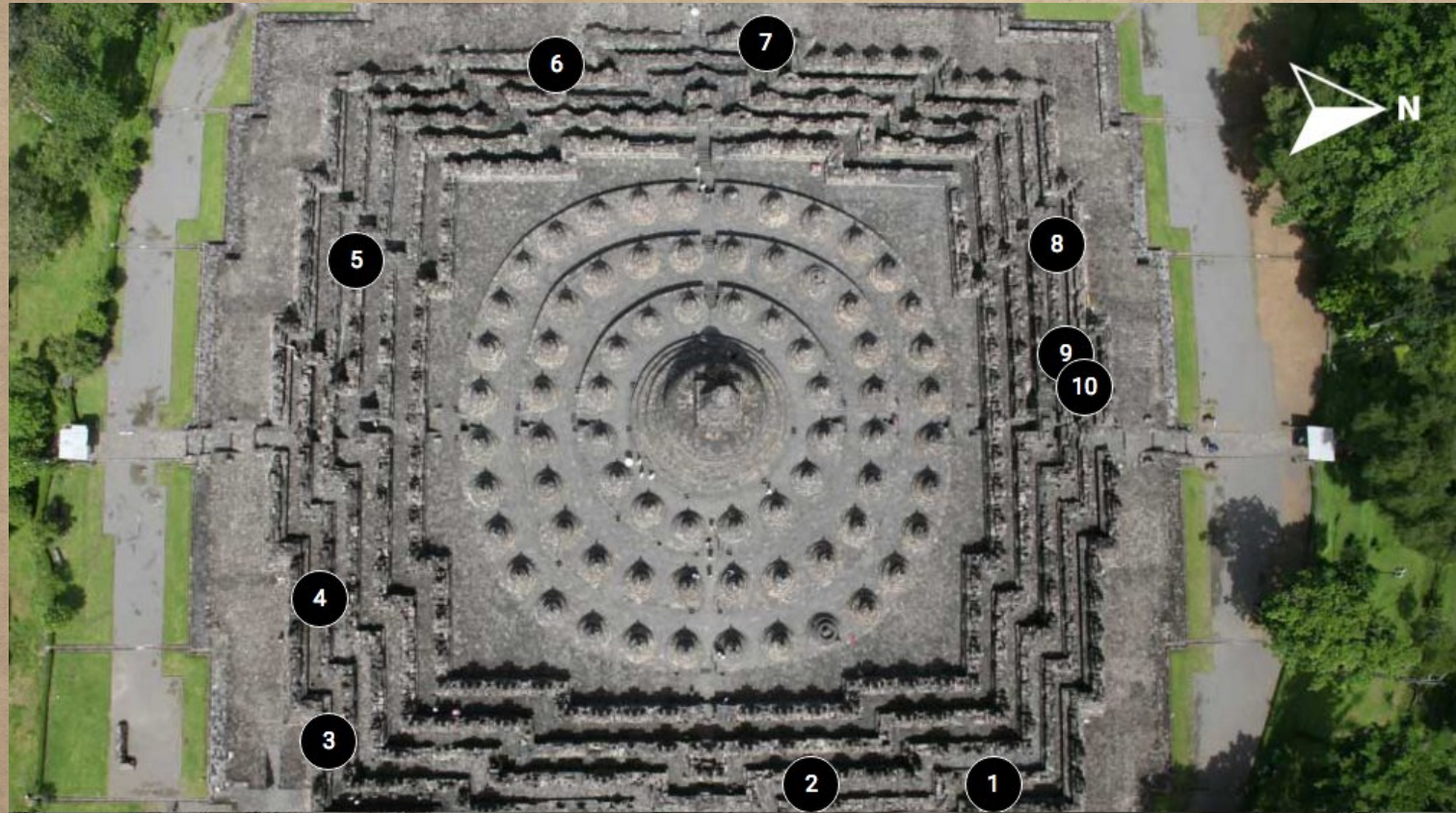


ARC Days, Ritsumeikan University, July 31, 2021

CONCEPTUAL APPROACHES OF THE RESEARCH



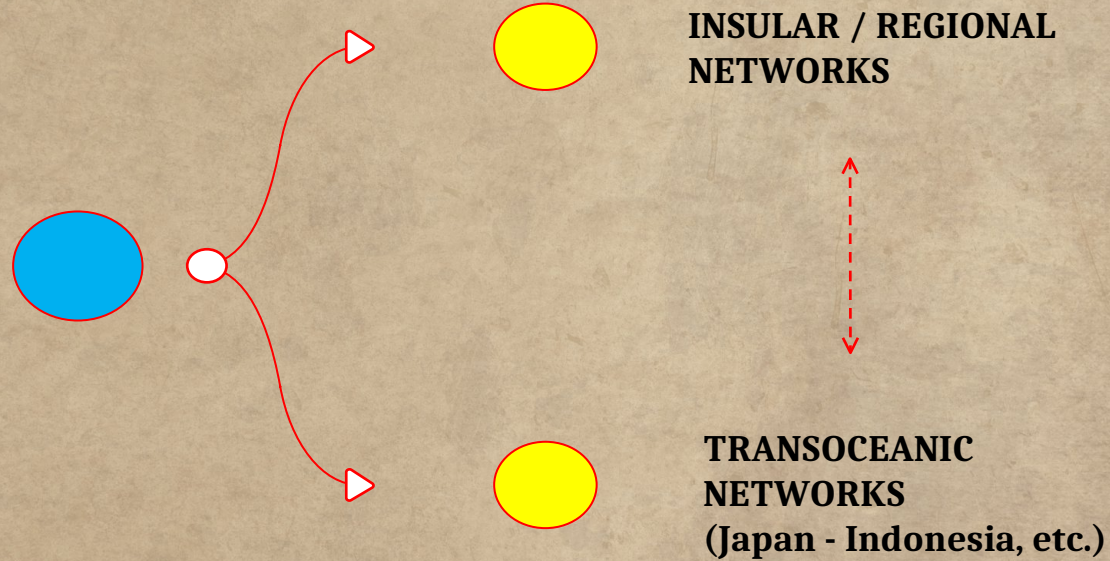
(1) BOROBUDUR MARITIME LANDSCAPE



© Balai Konservasi Borobudur

At least 10 relief panels depicting boats and ships

**(2) MARITIME
CONNECTIONS**



DESCRIPTIONS OF THE RESEARCH



Project Objectives

- 1) create digital database to store digitized data of the 9th-17th C maritime landscape in Indonesia
- 2) identifying digital archives of the ancient Japan-Indonesia transoceanic relation
- 3) 3D visualization of maritime transportation and marine ecologies as depicted on temple reliefs (close-range photogrammetry)

RESEARCH TARGETS / OUTPUTS



01

**Maritime
Database**

02

**Archive
Identification**

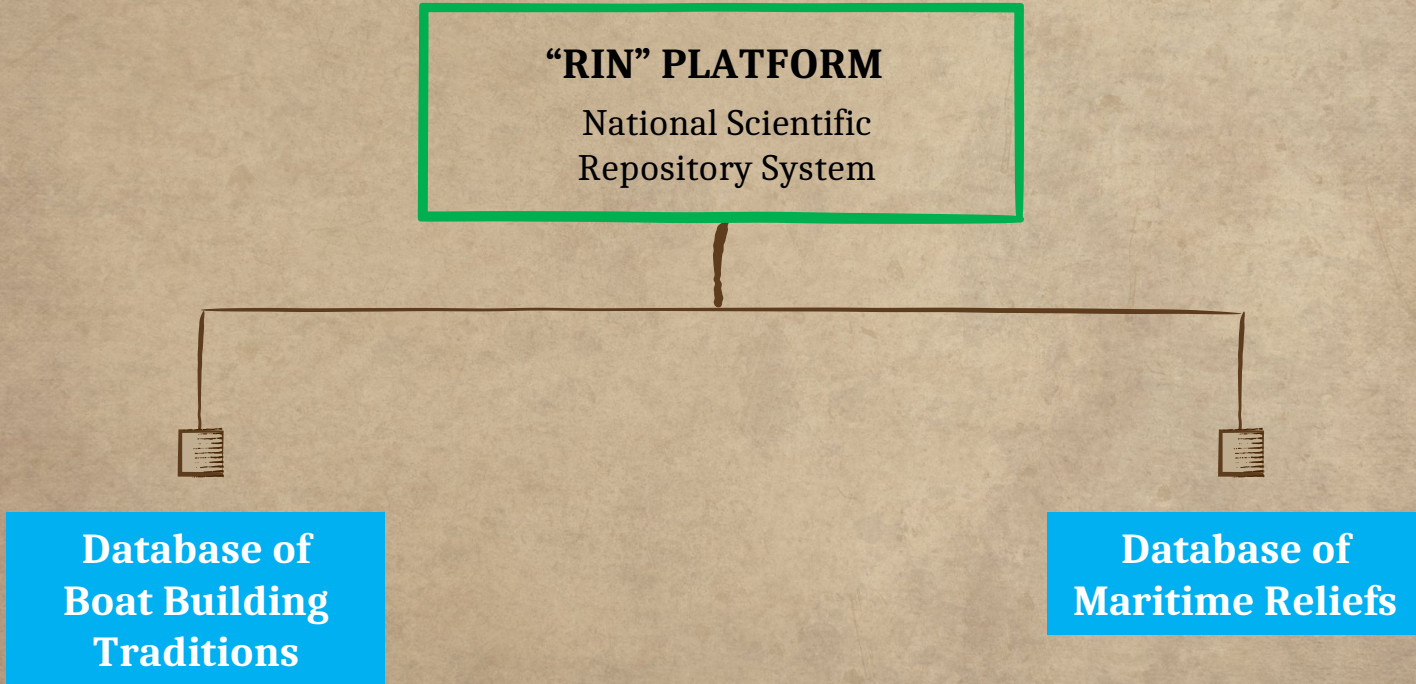
03

**High-Quality
3D Visualization
(Reliefs)**

04

**High-Quality
3D Visualization
(Artifacts)**

DATABASE FRAMEWORKS



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borobudur

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☒ Files (5)

☒ Publication Year

Publication Year

2018 (9)

2020 (2)

Publication Status

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Draft (3)

Unpublished (3)

Author Name

Thufail, Fadjar Ibnu (2)

A. Widjaja, Elizabeth (1)

Kanti, Atit (1)

Kartawinata, Kuswata (1)

Lia Putri, Ade (1)

1 to 10 of 14 Results

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Borobudur Archives Draft Unpublished



Apr 29, 2021 - Indonesian Digital Heritage Dataverse

Thufail, Fadjar Ibnu, 2021, "Borobudur Archives", <https://hdl.handle.net/20.500.12690/RIN/WDFUN1>, RIN Dataverse, DRAFT VERSION

... Textual archives of Borobudur ...

Borobudur Visualization Draft Unpublished



Apr 29, 2021 - Indonesian Digital Heritage Dataverse

Thufail, Fadjar Ibnu, 2021, "Borobudur Visualization", <https://hdl.handle.net/20.500.12690/RIN/Q3QQLU>, RIN Dataverse, DRAFT VERSION

... Dataset of Digital Visualization of Borobudur Temple ...

Borobudur Ancient Lake Site



Mar 26, 2018 - Buku Dataverse

Murwanto, Helmy; Purwoarminta, Ananta, 2018, "Borobudur Ancient Lake Site", <https://hdl.handle.net/20.500.12690/RIN/LDP6NS>, RIN Dataverse, V1

... A hypothesis about the existence of a Borobudur lake was first introduced by Nieuwenkamp (1931). He ...

More...

Indonesian Digital Heritage Dataverse (Lembaga Ilmu Pengetahuan Indonesia)

RIN Dataverse > Indonesian Digital Heritage Dataverse > **Borobudur Visualization**

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Borobudur Visualization

Draft

Unpublished

Thufail, Fadjar Ibnu, 2021, "Borobudur Visualization", <https://hdl.handle.net/20.500.12690/RIN/Q3QQLU>, RIN Dataverse, DRAFT VERSION [?](#)

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Dataset Metrics [?](#)

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Description [?](#)

Dataset of Digital Visualization of Borobudur Temple

Subject [?](#)

Arts and Humanities; Computer and Information Science; Social Sciences

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Borobudur3D_Global_1.png

PNG Image - 15.3 MB - Apr 29, 2021 - 0 Downloads

MD5: 5234fdd602b299795e6430228520e3f



3D Visualization of Borobudur Temple taken with aerial drone scanning

[📄 Download](#)

DATABASE CATEGORIES

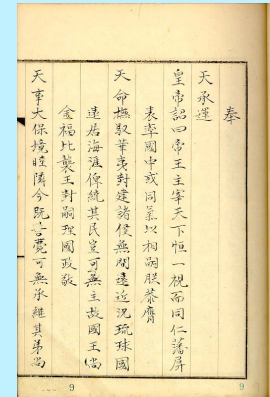
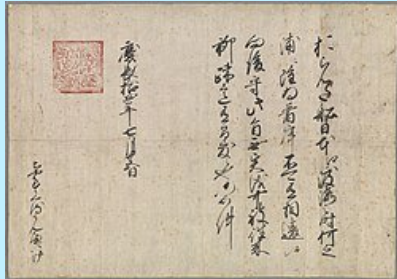
**DEJIMA
ARCHIVE
(VOC)**

ARCHIVES

**OKINAWA
(RYUKYU)
ARCHIVE**

Trade pass
issued to VOC

Rekidai Hoan
(歴代宝案)





86

Outrigger

3D Visualization and Extraction of Water Transportation Reliefs

Photos: Krom and Van Erp, 1920



Punjulharjo Boat

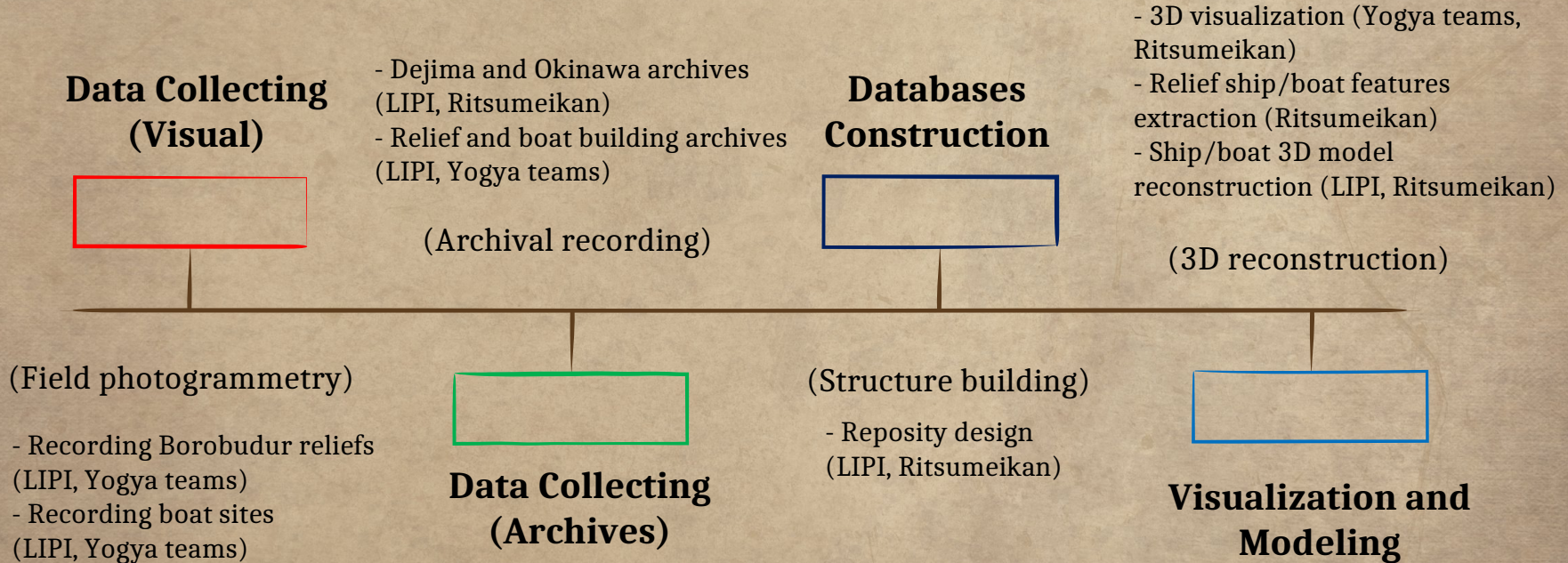
Lashed-lug technique, commonly found in Southeast Asian boat-building technique

3D Visualization and Model Reconstruction of Boat-building Technology



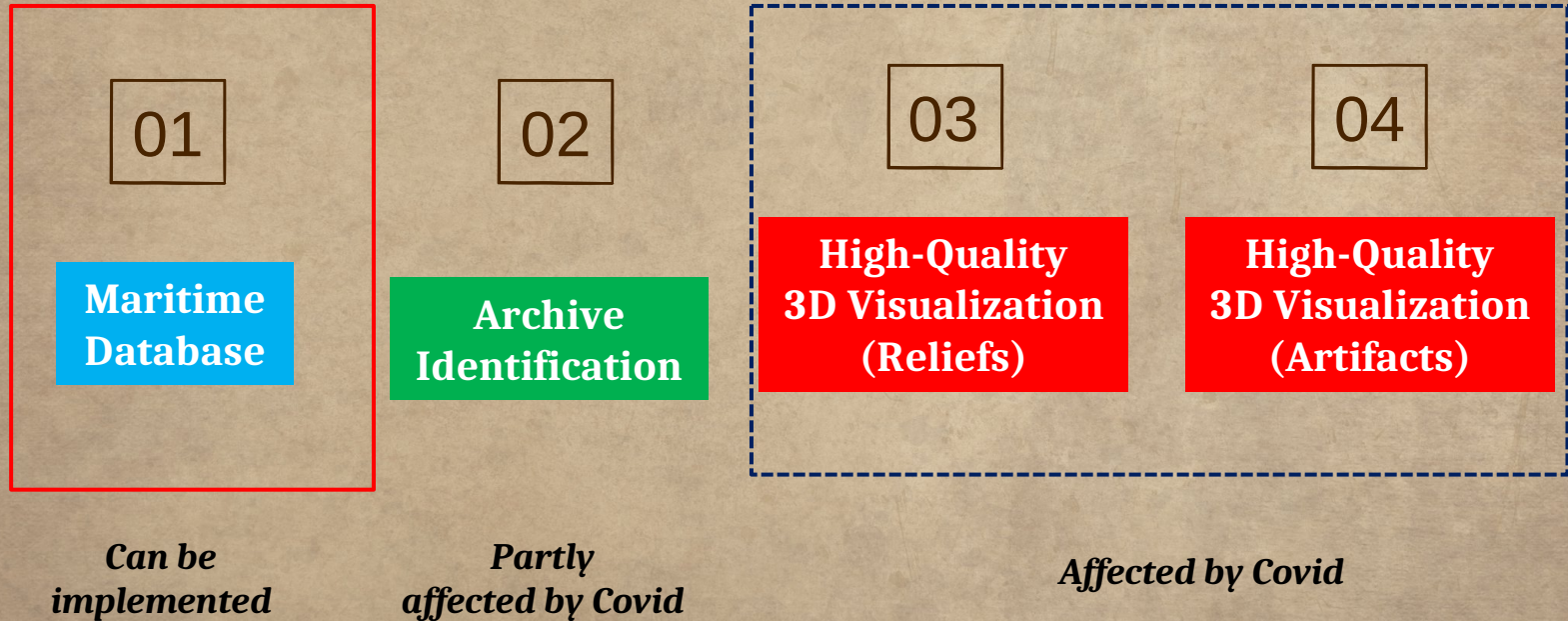
CAD reconstruction

RESEARCH PROCESS AND COLLABORATION





PROBLEM / CONSTRAINT



ARIGATOU GOZAIMASHITA

fadjarthufail@gmail.com



age hath these
passed by English
was by that valiant
Sir Francis Drake
the Pelican and second
gentleman master
and his in the desire 1586

This South part
of the world contains
almost the third part of the
Globe is yet unknowne certain
sea-galls excepted which
rather shewe there is a land
then disprove either Land
people or Commodities

Witacorum regio
the Country of Par
rats so called of y^e Port
gals from y^e extraordinary