Drawing from the Crowd: A Citizen Science Platform for Mapping *Ukiyo-e* Geography

集合知を描く: 市民科学浮世絵マッピングプラットフォーム

Serendipity Event

The Nippon Social Innovators Collaboration (NSIC)

August 16, 2024 21:00 JST

THE NIPPON FOUNDATION

For Social Innovation

Goal

A prototype platform (“wireframe”)
on which citizen scientists
help georeference selected views
of Japan in print (*ukiyo-e*)

- not fully functional
- but specifying workflows, data, models and curatorial texts (EN / JP)

https://copilot.microsoft.com/images/create/a-small-group-of-elderly-japanese-volunteers-sitti/1-66b384d19da84d85b07f654fd0fb5f31?id=V5oWOej7RmkfQ7VE00biRA%3D%3D&view=detailv2&idpp=genimg&idpclose=1&thid=OIG3.htOhb9gEYBLONrog_uf8&skey=L4QoJ5vzD1w2y0uNBg0E2fUgCjwCvxMf8hQKYmbLw8o&form=SYDBIC

Overview

A _ The Topic

1. Terms
   a. *Ukiyo-e*
   b. Citizen Science
2. Research questions
   a. Historical trustworthiness
   b. Topographical relation
   c. Japanese citizen science

B _ The Project

3. Project Team
4. Smapshot
5. Workflow
6. Significance

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1.a “*Ukiyo-e*”?

Tokugawa-period
(1603—1868)
ukiyo-e prints

Thumbnail screenshot,
ARC 浮世絵ポータルデータベース/
Ukiyo-e Portal Database,
Art Research Center,
Ritsumeikan University, Kyoto
(containing 239’907 entries on
4.7.2024)
https://www.dh-jac.net/db/nishikie/search_portal.php

1.b “Citizen Science”?

- involves the public in scientific research
- brings together science, policy makers, and society
- scientific work that may be used as a part of a broader scientific activity

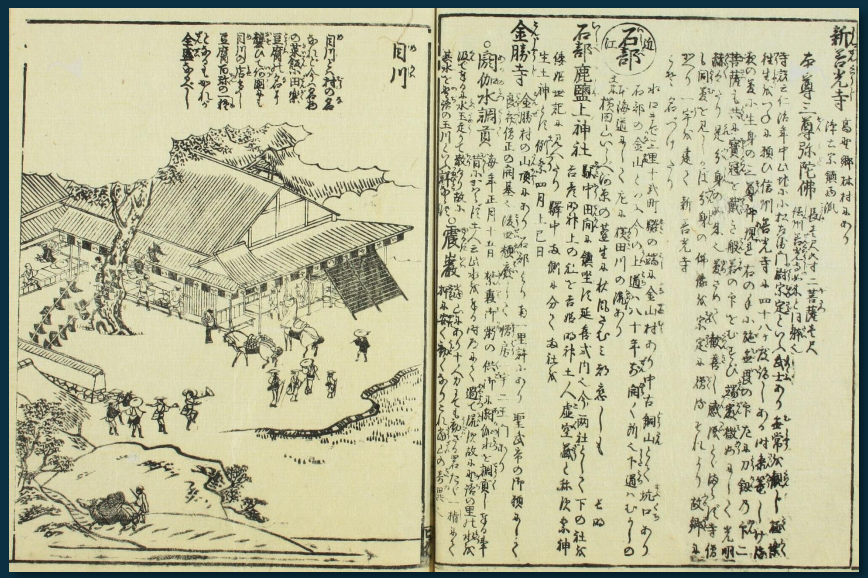
Definition and image from:
https://eu-citizen.science/

2. Research questions

- Do *ukiyo-e* depict Tokugawa Japan?
- How do *ukiyo-e* relate to topographical reality?

    + how can we digitally enable citizen scientists to contribute meaningful research for answering these questions?

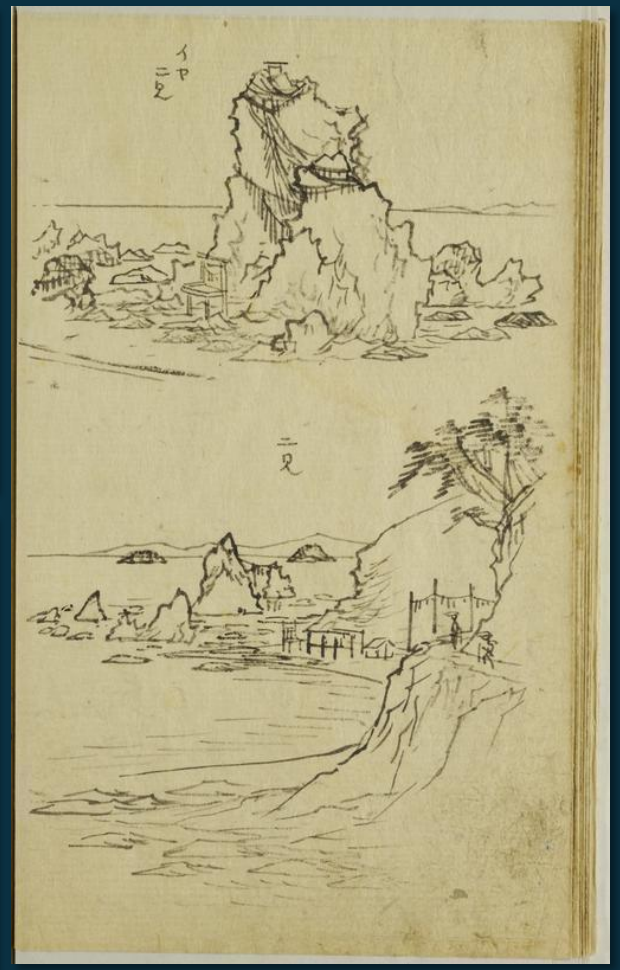
2.a Do *ukiyo-e* depict Tokugawa Japan?



Left: Illustration of Okabe from «Compilation of Views of Famous Sights along the Tōkaidō» (東海道名所図会 *Tōkaidō meisho zue*) ; text by Akisato Ritō and illustrated by Kitao Masayoshi and Takehara Shunsensai, 1797, vl. I, Waseda University.
Middle: Utagawa Hiroshige: «Changing Porters and Horses at Fujieda (藤枝 人馬継立 Fujieda: Jinba Keitatsu)», from the series *Fifty-Three Stations of the Tōkaidō* (東海道五十三次之内*Tōkaidō gojūsan tsugi no uchi)*, c.1834, Minneapolis Institute of Art.
Right: Utagawa Hiroshige: «Kyoto: The Great Bridge at Sanjō (大尾 京師 三条大橋 Taibi, Keishi, Sanjō Ōhashi), from the series *Fifty-Three Stations of the Tōkaidō* (東海道五十三次Tōkaidō gojūsan tsugi), c. 1834, Metropolitan Museum of Art.

https://collections.artsmia.org/art/62188/nihonbashi-utagawa-hiroshige;
https://www.metmuseum.org/art/collection/search/36976;
https://commons.wikimedia.org/wiki/File:Hiroshige-53-Stations-Hoeido-template-tokaido-meisho-zue-vl-1-Ishibe.jpg

2.b How do *ukiyo*-e relate to topographical reality?



L: *Google Maps Streetview screenshots*, 2024.
M: Utagawa Hiroshige: *Sketchbooks*, 1845—1850. British Museum.
R: Utagawa Hiroshige: “Futami Bay in Ise Province (Ise Futamigaura)”, from the series *Thirty-six Views of Mount Fuji (Fuji sanjūrokkei)*, 1858.

B _ The Project

3. Project Team
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3. Project Team

“Drawing from the Crowd:
A Citizen Science Platform
for Mapping *Ukiyo-e* Geography”

Dr. Drew RICHARDSON

Dr. Stephanie SANTSCHI

Hirohito TSUJI

Dr. Himanshu PANDAY

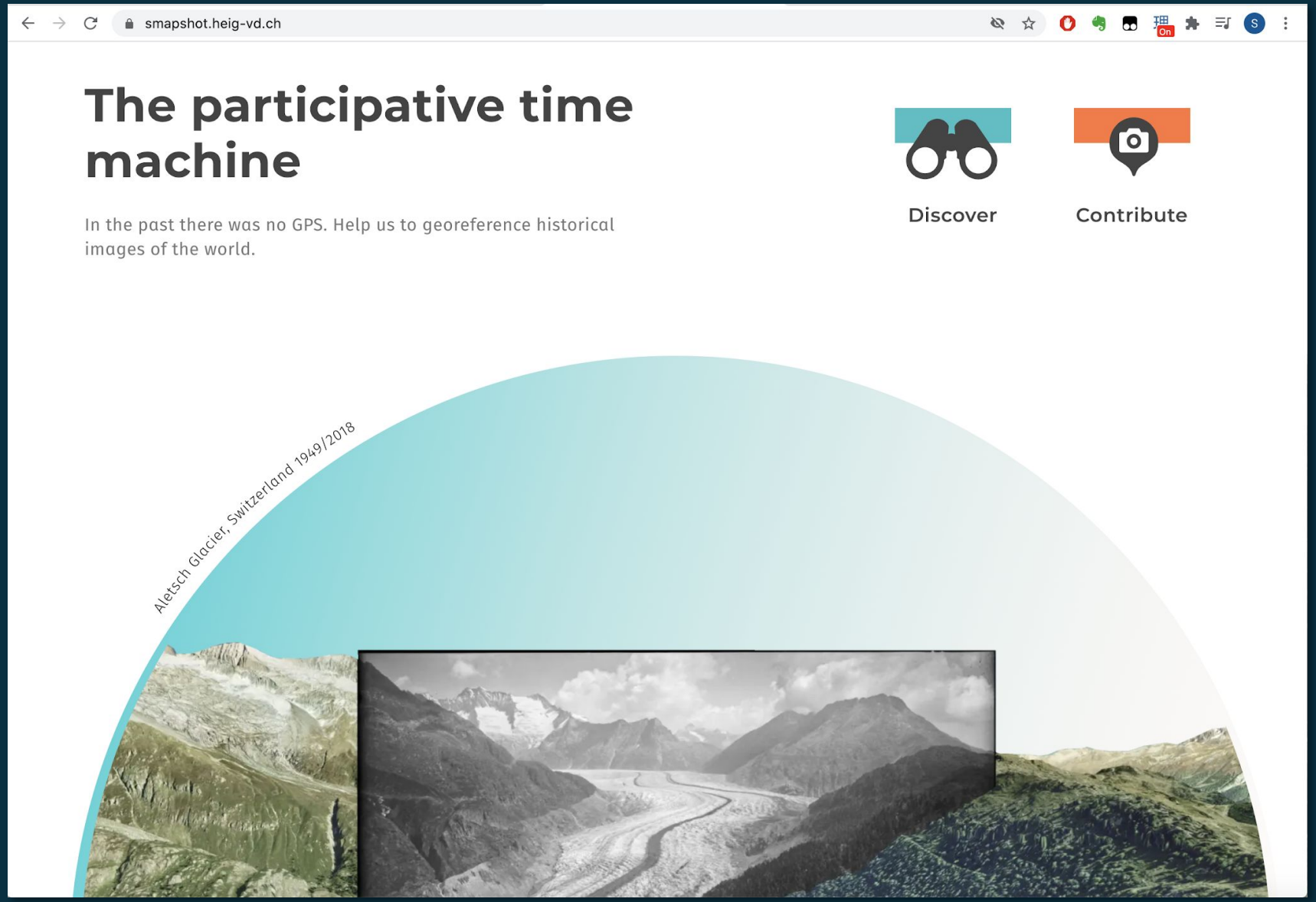
4. Smapshot

Haute Ecole d'Ingénierie et de Gestion du Canton de Vaud
Institut d'ingénierie du territoire

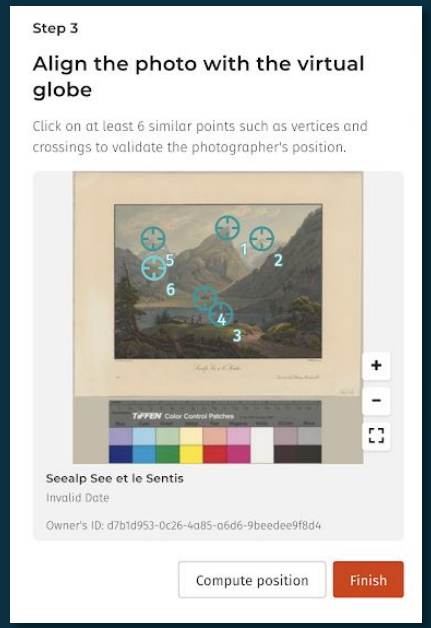
Prof. Jens Ingensand
Prof. Stéphane Lecorney

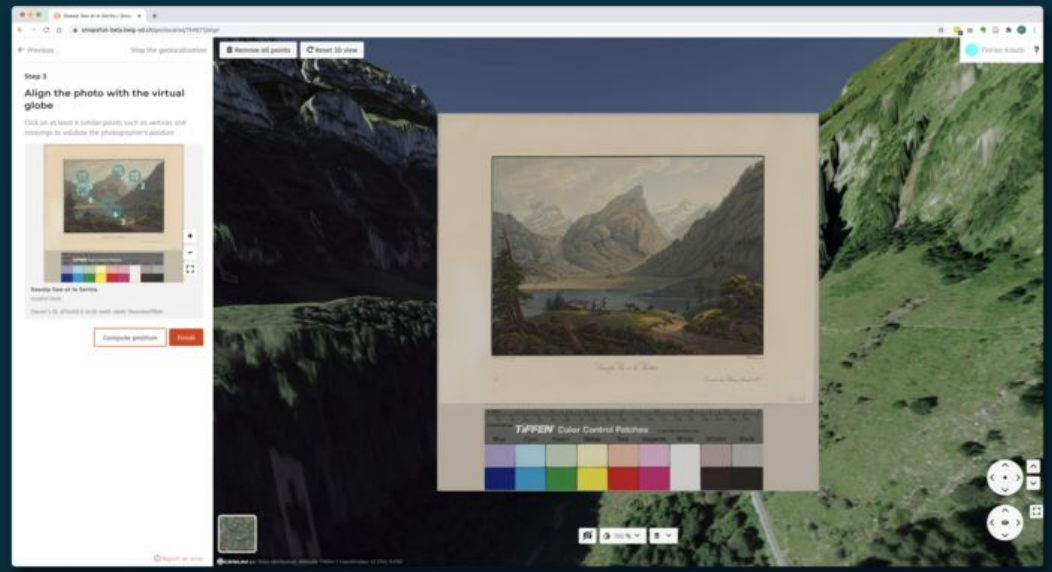
"monoplotting"

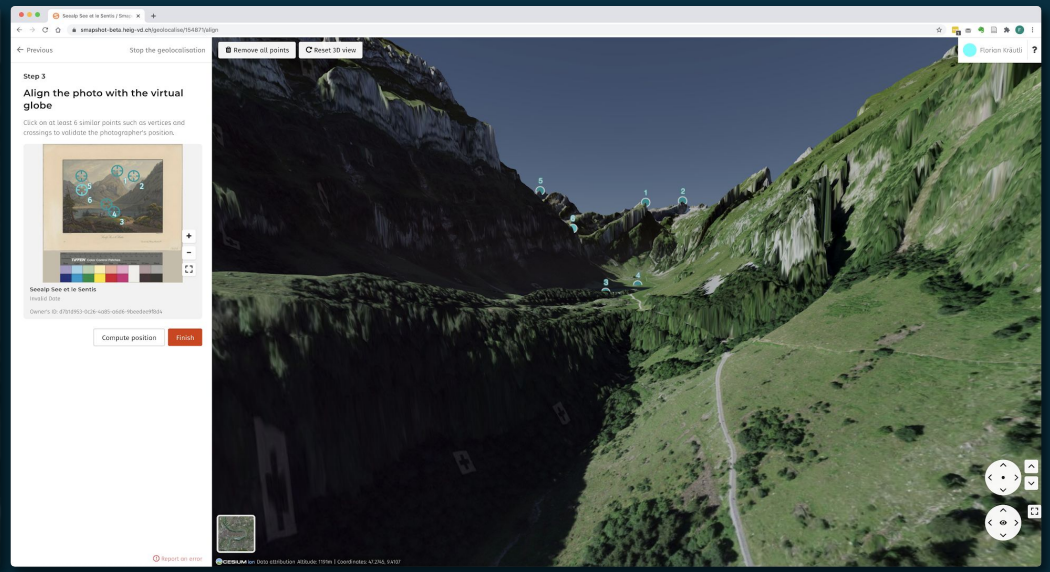
Smapshot.heig-vd.ch

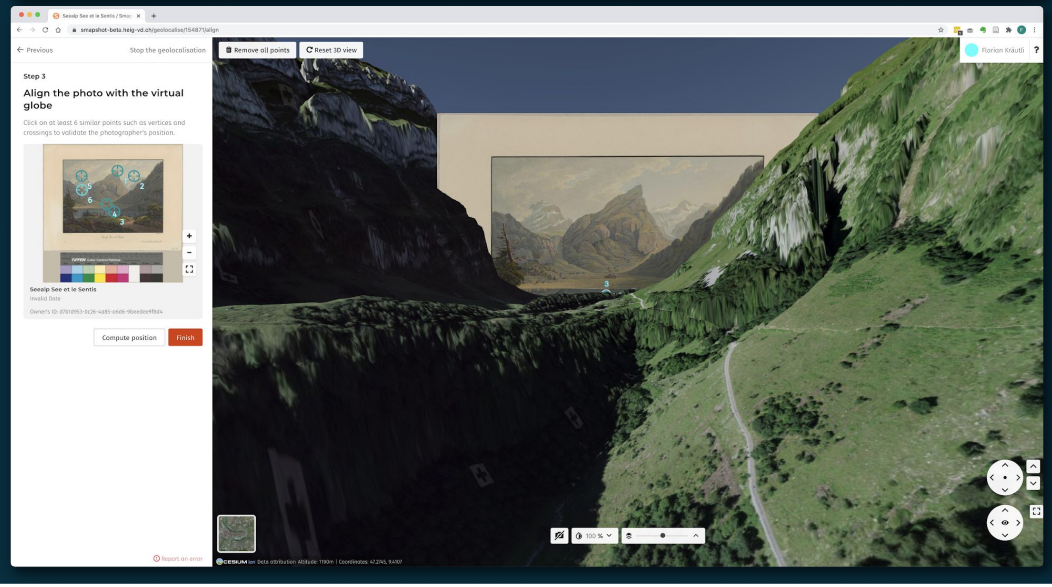


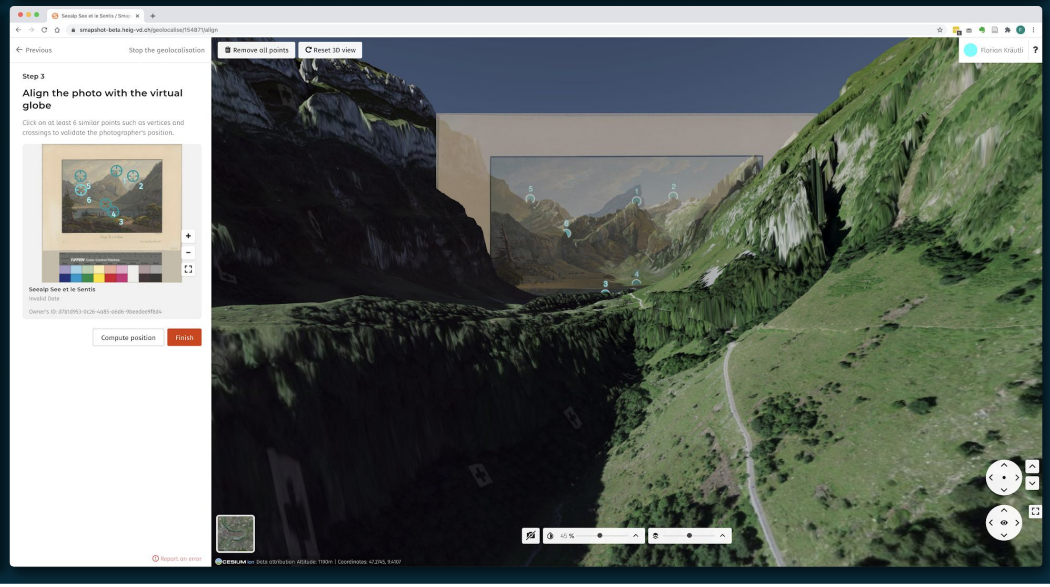
Smapshot / monoplotting

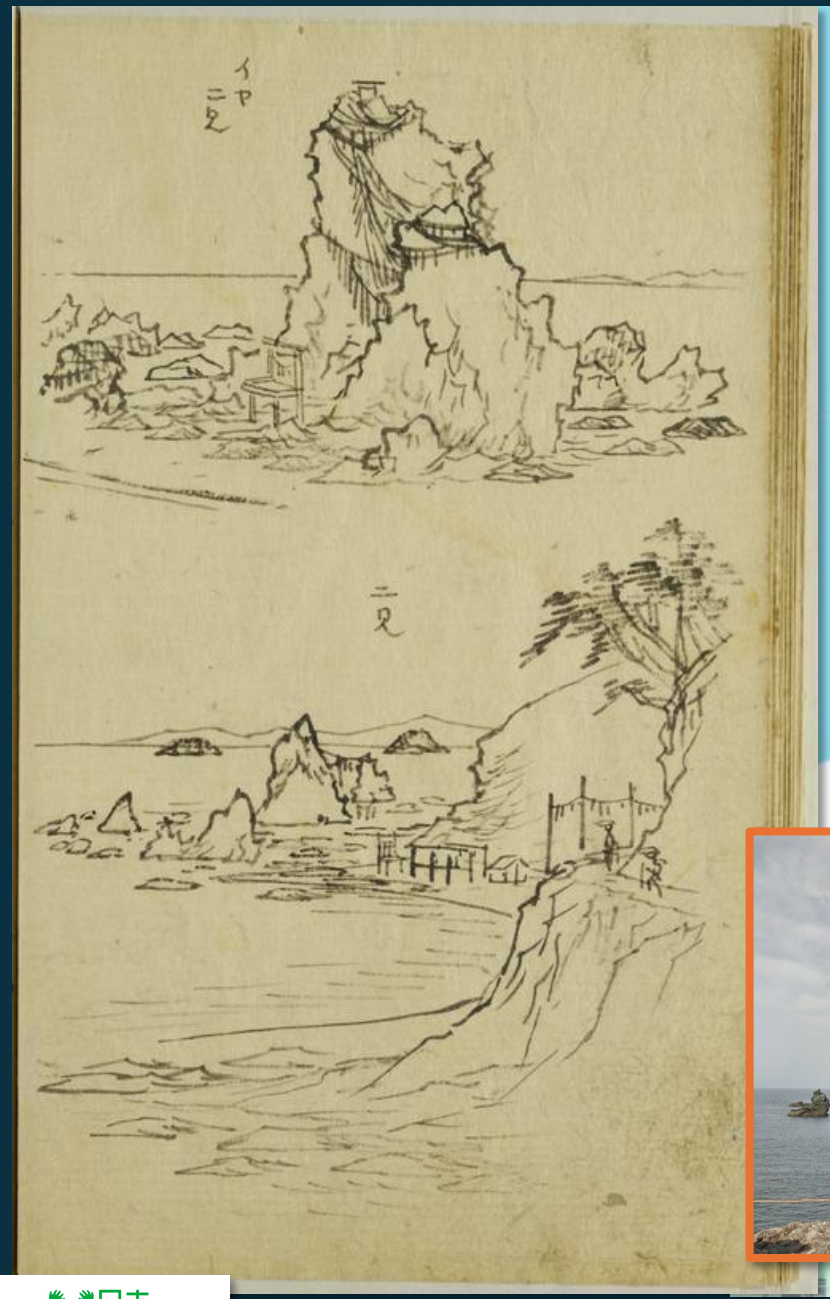






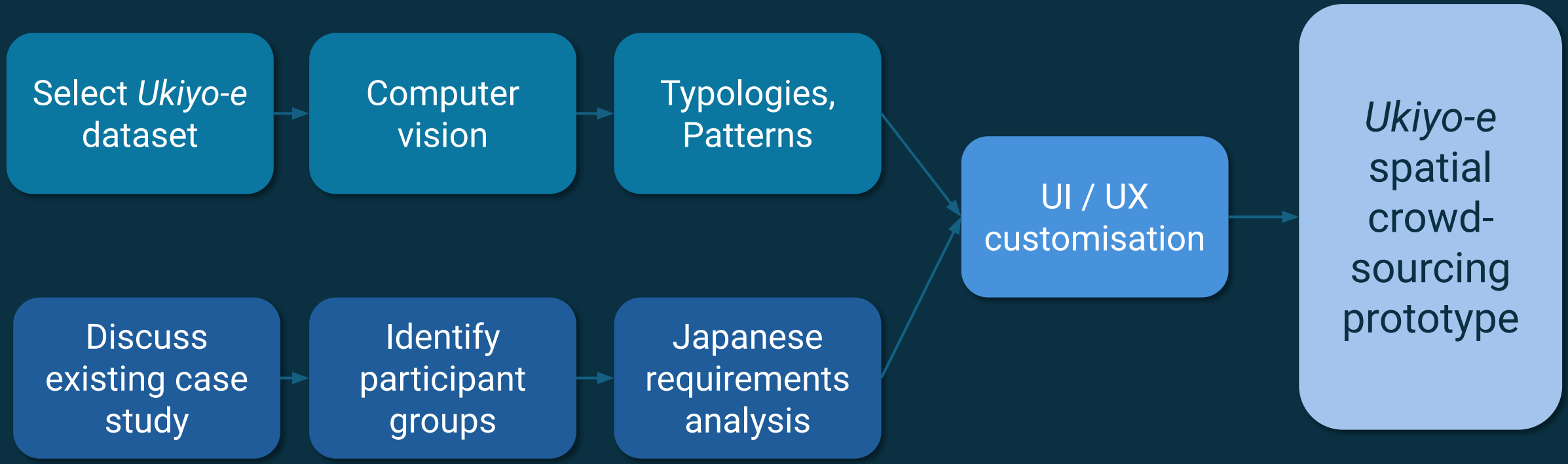






かえる岩
Meoto Iwa
(Wedded Rocks)
夫婦岩
蛙岩(親子蛙)
Shinto shrine
日の神皇居遙拝所
Shinto shrine
Futamiokitama Shrine
二見興玉神社
Shinto shrine with many frog sculptures
Futamiokitama Shrine
二見興玉神社 社務所
契りの松・本居宣長歌碑

5. Workflow


Select *Ukiyo-e* dataset
Computer vision
Typologies, Patterns
Discuss existing case study
Identify participant groups
Japanese requirements analysis
UI / UX customisation
Ukiyo-e spatial crowd-sourcing prototype

6. Significance

Sustainable Communities 	Participatory Research	Integrate communities Grow knowledge Foster environmental identification	citizens
Strong Institutions 	Collaborative Research	Dialogue across disciplines Innovate methodology Understand power structures	scholars
Quality Education 	Computational Art History Environmental Studies	Engage Build expertise Teach skills for the future	learners

UN Sustainable Development Goals: https://sdgs.un.org/