

Toward establishing the standard digital public history framework: information platform for Japanese historical materials

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This report describes the methodology of public history practice based on a data infrastructure system for historical materials in Japan. In the 2020s, researchers, local governments, and industries started collaborating to conduct historical research, primarily through preserving and understanding local historical materials. Although the term “public history” has a multifaceted meaning worldwide, we define public history as an attempt to conduct research not only with professional historians but also with non-professional researchers and citizens. Some digital archives, such as Japan Disasters Digital Archive [Gerster et al. 2022], have educational functions for citizens. Still, we want them to be not only recipients but also co-creators of historical knowledge. Specifically, we realize this with a data infrastructure system named “khirin,” which stores, connects, and publishes historical materials with various representations and formats like RDF, IIIF, and TEI.

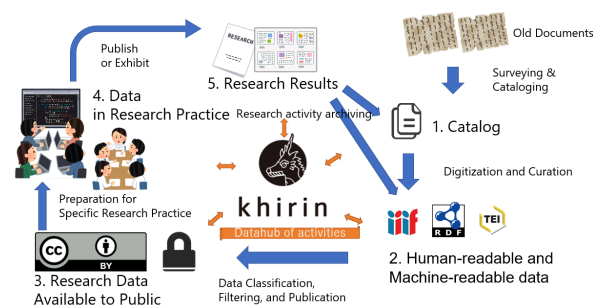


Fig. 1 Comprehensive research on data handling around the “khirin”

Using khirin as a hub, we have been discussing and solving various problems related to historical collaborations (Fig. 1). In Japan, there are many historical materials in each local area, even in the houses or private storages of local citizens. The first process of our methodology is surveying and cataloging, in other words, registering historical materials stored in such places. We first go there, gather historical materials information, and catalog them. Building a network between local governments or universities is helpful in the activity, and we collaborate with Siryo-net (literally translated as Network for Historical Materials <http://siryonet.jp/>). The second process is digitization and curation of them. This pro-

cess can be subdivided into the types described in Fig. 2. The third process is data classification, filtering, and publication (Fig. 3). In this process, we must assess copyrights, and privacy and personality rights of materials. Then, as a fourth process, we finally research with that data. Historians tend to read the original material directly and, based on the contents, search related materials or research papers; Researchers in other domains, such as informatics, linguistics, or seismology, tend to extract information from contents or metadata in terms of their interest first; Citizens generally want to grasp the whole image of the area, specific person, or cultural heritage, and translated or visual materials help their understandings. Therefore, we must prepare data for practical uses: 4.1 Data for historians, 4.2 Data for researchers other than historians, and 4.3 Data for citizens. Machine-readable data created in Step 2, adhering to international standards, enables flexible and swift data transformation, presentation, and curation for specific purposes. The fifth step is making the research results reusable by archiving result materials in khirin. We suppose three types of results: 5.1 Outputs, 5.2 Outcomes, and 5.3 Impacts; these terms are used in the context of research impact assessment [Hinrichs-Krapels et al. 2016]. Each type of result has a corresponding style of representation: paper publication, exhibition, and news articles, respectively. All the processes and khirin as facilitation platforms for these processes will be examined in historical research practices regarding integrity in historical studies and the inclusion of researchers in other domains and citizens.

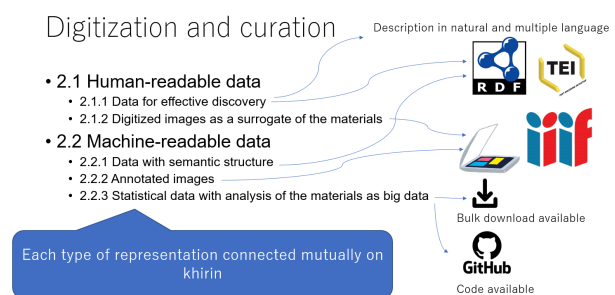


Fig. 2 Digitization and Curation

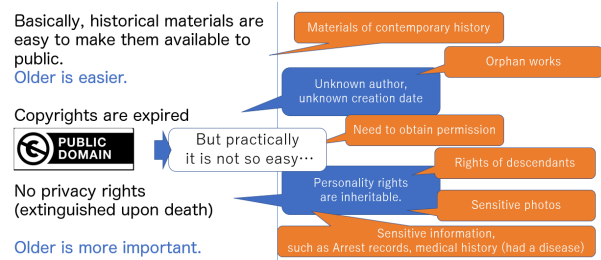


Fig. 3 Data Classification, Filtering, and Publication

Khirin inputs, outputs, and represents information for each process. To practice public history, we must prepare sufficient open data available for citizens to conduct research. Going further back the processes, not only directly human-readable data but also machine-readable data compiled and visualized from the perspective of meaning and statistics will play an essential role in helping citizens understand historical materials. While working on collaborative projects between academia, local government, and industry, we still implement public history using khirin. Therefore, to

create a collaborative approach with the public and to make the process of opening up the data to the public more efficient, we would like to discuss the possibilities based on each piece of data. From Data Management Plan (DMP) templates to FAIR Implementation Profiles checklists [Schultes et al. 2020], we plan to adopt a documentation-based assessment of whether the system and data can support research activities.

Khirin was not merely created as a database system but as an information hub for comprehensive historical research. While we have completed the implementation of the system, the process of data input, utilization, and evaluation is still in its early stages and will be addressed moving forward. The methodology proposed above will also update the way of thinking and analyzing in the historical research process and establish the standard digital public history framework.

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