

Japan Culture Group

Project Leader

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Applications and Expressions of Multimedia-type Archives

This project develops multimedia databases that correlate with image, audio, and video functions--their various applications, interfaces, and research on how to express research results on the web. We hope the multimedia databases to furnish a research infrastructure for other humanities projects.

The materials we deal with are historical documents and images out of copyright, which urge us to construct online systems for display and research. For this purpose, standards should be set regarding recording methods and data formatting of the contents. This process requires us to adopt the latest digital archival technologies while giving full consideration to the natures and characteristics of research materials. In this sense, this project calls for participation of researchers versed in both humanities and science.

1. Research of Recording Methods and Metadata Construction

This project deals with various data formats of text, image, audio, and video, which also means that we have to deal with diverse recording methods, depending upon research materials. For example, this project makes it possible to record a woodblock print of *ukiyo-e*, a representative genre of early modern painting, in three images by using three kinds of lighting. In the case of woodblocks themselves, we have produced five images with five kinds of lighting.

Also, many historical materials need to place metadata at particular locations. In those cases, it is necessary to organize metadata along with recording the locations. If the object in question is three-dimensional, as in the cases of ceramics and lacquer ware, it is imperative to come up with another way of recording. Moreover, even if a recording method is decided on, selection of search entries in the database is still open to variation, according to research materials or research methods. Collaborating with other research groups, therefore, we have been constructing various material-oriented research databases, and experimenting archival methods and applications.



Screenshots of correlating systems for book browsing, reprinting records, and user memo

2. Research on User-Contribution-Type Databases and Expressions of Research Outcomes

This project also constructs Web 2.0-type interactive databases which correlate with archival materials, which make it easier for researchers to accumulate information for their research. In some cases, moreover, we set these databases to allow personal research notes to be shared and used through the Internet.

Under construction is a text-centered database called ArtWiki, which employs the MediaWiki system. This system operates the same way as Wikipedia, but the difference is that ours only allows entries from the Center's designated members with special expertise. Furthermore, while Wikipedia takes a form of encyclopedia, ArtWiki only catalogues two items, i.e., title and text-commentary, along with images. Used as a very simplified automatic hyperlink database, therefore, the latter is expected to work as an archival system of knowledge, surpassing an encyclopedia. Besides that, we are also developing a user-contribution-type database that is directly connected to archival database, which we hope will greatly improve research efficiency.