



**Documentation
Center on
Contemporary Japan
(Reischauer Institute,
Sponsor):
Antique Map Digital
Image Archives**

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With the advancement of digital image compression technology, the current digitization movement has been extending into broader areas of storage and retrieval of cultural assets in digital image archive formats. This movement intends to pass cultural inheritances to the next generation by digitizing invaluable cultural artifacts, along with rare and important research materials, into high-quality image databases. With the explosive growth of the Internet, the digital image archive movement has been increasingly active in recent years throughout Japan. Many libraries and museums house enormous numbers of artifacts, but one often finds such valuable materials neglected and forgotten, lying silently covered with dust in the corners of storage areas. Retrieval of such materials is usually not simple due to space problems. Digital archives, then, which are relatively free from restrictions of time and space, can become viable alternatives for both the owners and users of such cultural materials, especially antique maps. Thus I would like to draw your attention to the growing practice of digitizing antique maps.

***Dai Nihon enikai yochi zenzu*
(Complete Survey of the Japanese Coast) (National Diet Library)**
<http://www.ndl.go.jp/exhibit/50/html/wb39-6/mokuji.html>

The *Dai Nihon enikai yochi zenzu* (Complete Survey of the Japanese Coast), the first geographical survey maps of Japan, were made by Tadataka Ino (1745-1818), and are known as “Ino Maps” in general. They consist of three hand-produced sets in three scales: a large-scale set (1:36,000, originally consisting of 214 sheets), a medium-scale set (1:216,000, originally consisting of 64

sheets), and a small-scale set (1:432,000, originally consisting of three sheets). Many sheets of the large-scale map (the most detailed) have been destroyed in fires, and only about sixty survive in Japan. Fortunately, however, 206 sheets (later verified as 207) of the Ino large-scale map were discovered at the Library of Congress in Washington, D.C. last year. Coincidentally it was the bicentennial anniversary of the date when Ino Tadataka began surveying all of Japan. Currently, a homecoming exhibition is under development, and meanwhile one can view parts of this Ino map through digital archives.

The National Diet Library (NDL) houses the Japanese holdings of the *Dai Nihon enikai yochi zenzu*, which is today formed of *shahon* made in the Meiji era and donated by the Meteorological Agency. It exhibits forty-three sheets of the large-scale map as high quality digital images. Due to their visual nature, maps are especially suitable for digital image databases. Users can enjoy viewing digitized maps as many times as they want without touching physical surfaces, and digital image archives are thus free from damage or deterioration. If maps are not used but just being stored, they may be meaningless. Digitized geographical information can open the sources for a variety of capabilities and utilization. Developed as part of the Rare Book Image Database Project at the NDL, the *Dai Nihon enikai yochi zenzu* has several varieties of search functions and image displays, such as cross-referencing within the Project and detailed annotations. In addition to the list of sheets of the large-scale map, it contains a comprehensive geographical name index for old place names, current place names by municipal levels, and natural place names. One may find the place name list useful because it displays the whole contents at a time, which are arranged by the Japanese fifty syllables, while natural place names are organized by categories such as mountains, rivers, islands, lakes, and capes. One can also jump to the whole map divided into three sections by clicking images consisting of combined maps, full-sized, and enlargement of partial map images.

Old Maps of Nagasaki (International Research Center for Japanese Studies)
<http://www.nichibun.ac.jp/graphicversion/dbase/nagasakie.htm>

The Old Maps of Nagasaki project developed at the International Research Center for Japanese Studies (Nichibunken) includes 221 color photographic images whose originals are in the collection of the Nagasaki Municipal Museum. Because of this project so-called “museum items” are now revived as vivid JPEG images and can be easily accessible anywhere and anytime. One can obtain access free of charge (for research use only), though prior registration is required. Functional features of this image database are similar to those of the Database of Early Photographs at Nichibunken, which was introduced in this column in the previous issue of *Tsūshin*. However, it lacks truncation search functions, and as yet no old map image databases developed at any other institutions have such capability. The database has an excellent system structure for a digital image archive, including well-organized and balanced layouts as well as capabilities for browsing, lists, and bibliographies, with a variety of search methods specifically designed for ease of use. In addition, the user’s search history is displayed on the top of the screen. The database has the most functional and comprehensive search capabilities among the old map image archives introduced here. Especially helpful, a free key word search can be entered in both Japanese and English because captions are described in English as well.

Premodern Antique Map and Drawing Map Collection (University of Tokushima Library)
<http://www.lib.tokushima-u.ac.jp/~archive/index.html>

The Premodern Antique Map and Drawing Map Collection at the University of Tokushima Library features 200 items related to old maps in their premodern rare book collection. The collection includes not only maps of Tokushima but also of Edo, Kyoto, various provinces, and the world, as well as pictorial maps of clans, provinces, counties, villages, and rivers. The digital archive also includes the collection of the Hachisuka Family, the former *daimyō* of



Tokushima; it provides invaluable research materials for local history. Because of the limited size of the collection, the archive currently does not have a search engine; however, the database has as many as twenty categories to provide access points for future developments in search functions. Also, one can jump to an enlarged map of notable places from a front page, which is a special feature not found among similar old map image databases. Furthermore, the database offers bibliographical references and detailed annotations so as to assist systematic further research. This image database has the potential to become a full-scale image archive.

Ashida Antique Map Collection (Meiji University)

<http://www.lib.meiji.ac.jp/ashida/display/exhibit-2001/contents.html>

The Ashida Antique Map Collection at the Meiji University Library consists of approximately 2,500 items of geographical material, such as maps of Japan, China, Korea, and the world, and topography in the Edo period, collected by Koreto Ashida (1877-1960), a pioneer of Japanese topography. Covering the early period of Edo through the Showa era, over half of the collection is premodern. Regional maps are predominant (over ninety percent), and manuscript maps make up thirty percent of the total. Notable as a compiler of the *Dai-Nihon Chishi-Taikai* (Japan Topographic Encyclopedia, 40 volumes) (Tokyo: Yūzankaku, 1929-1933), Ashida reflected his scholarship and aesthetics in his collection, which has not only research value but also artistic value as well. Even today Meiji University is continuing an annual budget allocation to maintain and develop their unique collection of old maps. Although it does not have a free key word search, the search keys are organized by both region and chronology, and one can easily retrieve search results by simply clicking the code classified by region and chronology. The database has two types of images: high resolution and medium resolution. It is often said that one needs a wide range of knowledge from sociology and art history through religion to comprehend old maps, because they reflect the creators' aesthetics, worldviews, and values (Hiroshi Takeda). One of the fea-

tures to be mentioned about this archive is the comprehensive annotations of background information and bibliographical references. In addition, for those interested in viewpoints and research questions about the collection, reports by the Ashida Antique Map Collection Committee (<http://www.lib.meiji.ac.jp/ashida/articles/report-2000/preface.html>) might be useful for further study.

Edo Streets Digital Exhibition (University of Tokyo)

<http://www.lib.u-tokyo.ac.jp/enjikai/tenjikai96/index.html>

Portable maps made by woodblock printing, which indicated the locations of residential mansions for *daimyō* and warrior classes, enjoyed their heyday during the Edo period. They were used as practical tools in the everyday lives of people in old Edo. This type of printed maps, called *kiriezu*, or patch-work maps, are often misleading due to deformation or deletion of detail and are therefore not suitable to serve as a source for accurate geographical data. They do not correspond to current maps of Tokyo. Yet, maps are, in the first place, picture and drawing. The colorful woodblock maps, such as the Owariya-version of the patch-work maps, are aesthetic enough for contemporary people to appreciate as a sort of art due to their unique color and abstract design. It is no coincidence that current audiences pay special attention to such maps. The Edo Streets Digital Exhibition developed at the University of Tokyo includes colorful patch-work maps published from the early Edo period through the early Meiji era. Because this digital image archive was originally developed as catalogues for the named exhibition, it has comprehensive commentary on each map. However, it lacks search functions and has only one image resolution. Due to the fact that maps offer unlimited sources of information, and as Edo studies are receiving special attention as a research area in recent years, it would be desirable if this image archive could be transformed into an image database with a variety of search functions and capabilities.

Walking in Edo-Tokyo with Antique Map (APP Company)

<http://www.app-beya.com/>

A CD-ROM production by Keishi Nakagawa, a contemporary graphic designer and illustrator, aiming to view the world of Edo through the Owariya Edo Street Maps, is now available on the market. The uniqueness of this CD-ROM is that one can compare places on the old Edo map and the current Tokyo map by combining old maps and current scientific maps on a computer screen. This epoch-making offline resource provides the pleasure of not only viewing maps but also walking on actual streets on the map to understand geographical information and life in the Edo period. Due to its aspects of game and entertainment, contemporary users who have grown up in a culture with pervasive electronic images will find this CD-ROM satisfying, above and beyond the interesting contents. Viewing back and forth between Edo and Tokyo, which is an unattainable feature through a printed map, it demonstrates descriptive methods and functions achieved only through digital media. Including comparisons with the Owariya Edo Street Maps, Hiroshige's Edo woodblock prints, landmarks in Edo, and explanation of social conditions and city planning in the Edo period, the CD-ROM is an indispensable tool for exploring the old city. It might be worthwhile to reconstruct and reexperience the premodern world through new technology in the twenty-first century. Perhaps one could gain a greater sense of intimacy towards the protagonists in Edo literature and be able to understand the Edo culture more personally.

Old Northern Maps Cyber Exhibition (Hokkaido University)

<http://libserv2.lib.hokudai.ac.jp/125/map.html>

Due to the importance of maps for national defense, maps were forbidden for foreigners to possess or export in the Edo period. As represented by the Siebold Incident, maps have not been free from political situations and social environments. Hokkaido, formerly called Ezochi, had remained unknown for a long time. Even the Matsumae clan who ruled this region did not have an accurate geographical understanding of their territory. Because of Russia's ambition toward the Ezochi territory, which grew conspicuous in the late eighteenth centu-



ry, however, Ezochi came into geographical view for the Japanese. This image archive consists of a collection housed at the Institute of Northern Territory Studies, which was originally prepared as part of the 125th commemorative anniversary for Hokkaido University. The archive traces the historical process of how Ezochi has been transformed into the current Hokkaido. Ezochi was drawn in an oval shape extending to the north and the south on the *Genroku kunie zu*, a map produced by the order of the Edo shogunate in 1700. One might find it interesting to see the low level of knowledge of Hokkaido in those days. Because of the limited number of visual images included on the database, this archive does not have a search engine, though the database offers high density images through FlashPix, which allows layered image data. Furthermore, it has a function to manipulate image position, which is not found in this type of image databases anywhere; one can move images on a computer screen in any direction by simply clicking an icon called “pan.”

Asia in World Antique Map (Osaka University)

<http://www.library.osaka-u.ac.jp/tenji/maps/maps.htm>

During those days when land survey technology was primitive, maps were often made based on hearsay and guess or assumption. Antique maps, therefore, have been often perceived as reflections of the author’s world-views. The Asia in World Antique Map project at Osaka University consists of approximately one hundred images of maps published from the seventeenth century through the nineteenth century, covering North East Asia, including Japan, China, Korea, and Siberia. This image archive is invaluable for obtaining the Western geographical views toward Asia and is useful for tracing historical changes. Although it lacks a search engine, the database has a user-friendly search screen. One can retrieve a medium-sized map with bibliographic information by clicking authors and names of maps on a list organized chronologically on the right page, and can directly jump to a full-sized image in a JPEG file. It is interesting that Hokkaido is not included in any maps from the first up to the eighty-fourth included in this database. Also, *Japan, Manchuria, and the Kurile Isles* made by John Bartholomew, the third generation of the Bartholomews, a well-known family of geographers, shows an accurate map of Japan and Sakhalin, whereas it shows an inferior

map of the Korean Peninsula. The Western geographical perception toward East Asia seems to be vague even in the late nineteenth century.

In conclusion, through digital archive activities over the Internet that make valuable rare book materials available for virtual public viewing, old research materials which had been “dead storage” are now being demystified and revived. Such important and valuable materials are now available for everyone and have become approachable in our everyday life. The principle of archiving that embraces “historical heritage and information as common property for all people” can be achieved when such materials are delivered universally to the general public. It has been occasionally said that archival activities in Japan are somewhat behind. Yet, perhaps the IT (Information Technology) revolution can facilitate an expansion of genuine archival activities in Japan rooted in the ordinary citizen’s needs.

(I would like to express my gratitude toward Mr. Yoshiaki Kita at the Office of the Information Systems at Nagasaki University, who provided me with an inspiration for this topic.)

