



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

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Following the most recent digital technology, digitizing photographic resources into image databases for business and academic research activities has become increasingly active in recent years. In the news media and commercial photo industries, which produce enormous numbers of photographs daily, digital image database development is being adopted not only for facilitating efficient storage, organization, and management of their photograph collections, but also as an infrastructure for photo rental services. The demand for photographs and image resources has also increasingly grown in educational settings. Perhaps this demand could reflect a response to current learning styles in this visual age. Using only traditional teaching methods, one can hardly cultivate interest and motivation to study for those students who have grown up in a culture with increasingly predominant electronic images. Nowadays electronic images via computer technology are necessary tools for oral presentations and teaching. Instruction in history, for instance, often utilizes the Internet to present various historical images not otherwise available and supplemental resources that help students better comprehend historical events from various angles, a technique which is more in demand and becoming a growing expectation. I would like to take this opportunity to introduce photograph databases, which are one kind of digital image databases that have a wide variety of educational applications and are especially useful in various disciplines such as history, sociology, and anthropology that have traditionally relied more upon the written word.

AccuNet/AP Photo Archive
<http://ap.accuweather.com/apphoto/index.htm>
AP Photo Archive
<http://photoarchive.ap.org>

Distributing digitized photographic information services through a networked computer system has become common particularly in the area of mass communication. Among them The Associated Press, the American news distributor, has been distributing news via satellite to their clients across the world, such as newspaper companies and magazine publishers for some time now. AccuNet/AP Photo Archive is the largest comprehensive archive for photographs available online, through a server provided by AccuWeather, Inc. The archive contains approximately 700,000 photos from 1840 through the present. The majority are post-1995, but older ones are being scanned into the database on a regular basis, while up-to-the-minute images by newspaper companies and photojournalists from around the world who are affiliated with the AP are continually added as well. Searching is simple and easy, by just filling in the What, When, and Where fields. One can retrieve not only photographs but also, with benefit of computer hyperlink functions, newspaper articles as well as video clips from radio and television scripts. Contents of the AccuNet/AP Photo Archive are the same as those from the AP Photo Archive provided by The Associated Press alone. The only difference depends on the prospective users and their particular needs, as determined by their type and purpose and price structure. AP Photo Archive offers a pay-per-view photograph redistribution service aimed at registered corporate clients such as newspaper companies and advertising agents, whereas AccuNet/AP Photo Archive is a subscription-based service with affordable prices available only to K-12 schools, colleges and universities as well as libraries in accordance with various types and levels.

Mainichi Photo Bank
<http://photobank.mainichi.co.jp/>

The Mainichi Photo Bank offers ac-

cess to photographic resources accumulated by the *Mainichi Daily* newspaper over its 130-year history, which are available for photo rental. It is the largest photo database among the Japanese newspapers. Thankfully the database is accessible to anyone free of charge because it targets commercial clients such as publishers and broadcasters as well as individual Internet users as potential clients for its photo rental services. The database currently contains approximately 200,000 photos, including 120,000 photos taken from the Meiji period through the thirties (the Shōwa period), and, more recently, photographs taken after January 1998. Photos taken between the 1950s and 1997 have been gradually digitized, but only less than 10 % of them – those requested for photo rental – have been digitized thus far and many lack captions. At this moment, it is unknown when all remaining photos will be digitized. One can enjoy hyperlink functions because the database is linked to the *Mainichi Daily* newspaper's major articles published after August 1997. The database system and digitalization of photos were developed by Dai-Nihon Printing, Inc., which enjoys a good reputation for know-how in the development of high-resolution image archives.

In order to search photographs or images, "non-verbal information" manifested in the image needs to be translated into texts and characteristics and features of the subjects, which can then be sorted and organized to retrieve information. It is no exaggeration to say that the functional use of an image database depends on what and how access points are organized and sorted, including bibliographic data. The Mainichi Photo Bank includes precise information characterized in a photo, thus, for instance, one can use terms for facial expressions such as 'fury' and 'smile' as key words. Free access only allows one to view photos in a small image of the photograph, known as the thumbnail. One can view up to 40 photos at a time and then select any one to view in a larger size thumbnail for display. If one wants to purchase a desired photo, one proceeds to an online order form. Upon Mainichi



Information Service Center's completion of an assessment or confirmation of the requester's information (e.g., objectives and type of media), a positive print or data image will be sent to the requester. For educational use a photograph costs 2,000 yen, and for publication use, 6,000 yen per black and white photo and 20,000 yen per color photo. Overseas users may need to allow for shipping and handling costs in addition to these prices. The *moga* photo attached to the Director's article in this issue of *Tsūshin* was obtained through this service.

Bakumatsu and Meiji Old Photo Archives (Nagasaki University) <http://oldphoto.lb.nagasaki-u.ac.jp>

Photographic techniques invented by Daguerre in 1839 were brought to Nagasaki by a Dutch vessel in the following year. They took no time to spread throughout the country. Bakumatsu and Meiji Old Photo Archives developed at Nagasaki University contain valuable historical photographs preserved at this birthplace of Japanese photographic culture. Many of them depict scenes, lives, and folklore taken in Westerners' residential districts or sight seeing spots across Japan. Photographs in this database show how Japan was transforming from the late Edo period into the Meiji. Identified photographers' names provide an interesting perspective on how Japan was perceived in the eyes of Westerners. The notably large collection—containing over 5,400 photographs that are in relatively good condition—was subtly colored by craftsmen called professional painters. Four types of search screens, that can be entered in both Japanese and English are organized effectively in accordance with the purpose of use of the photographs. One can execute various searches without any specific knowledge of photographs. Free keyword search, for instance, includes searching not only captions to the photos but also descriptions of the photos, and one can select a photo by clicking a geographical name of an

area on a map. Furthermore, one can even reach a needed item by simply clicking a subject in 86 categories on a list, in addition to the key word search. These lists also usefully provide one with an overview of the history of Japanese photographs in this early period.

Database of Early Photographs (International Research Center for Japanese Studies) <http://www.nichibun.ac.jp/graphicversion/dbase/oldpe.htm>

The Database of Early Photographs at the International Research Center for Japanese Studies also offers historical photographs made during the late Edo period through early Meiji. One can enjoy experiencing the Meiji period through historical records captured in such photographs, which were the cutting edge medium back then. Types and coverage of photographs and capability of search in both Japanese and English are similar to those in the above-mentioned Old Photo Archives at Nagasaki University; however, the specific search methods and layouts are quite different. One cannot obtain results just by clicking fields, but needs to spell out search terms in a simple search, which consists of a free keyword search, or by an advanced search, to narrow down the search by filling columns for captions, notes and photographers. One may need to have some knowledge of historical photographs to execute an efficient search because of the limitation of suggested vocabularies in keywords columns. The truncation search and search history functions, which are not found in the other old photograph databases, are useful. The old photograph collections at the International Research Center for Japanese Studies are also available in the Database of Pictorial Images Outside Japan, which includes images and texts extracted from photographs and illustrations in research on Japanese culture published overseas. You may retrieve more results on some topics, such as 'geisha', from this database. Also, you may take ad-

vantage of a separate search engine with cross-reference that allows for a consolidated seamless search of three databases, the Database of Pictorial Images Outside Japan, the Database of Old Photographs, and the Database of Japanese Art.

Early Photo Database (Historiographical Institute at University of Tokyo) <http://www.hi.u-tokyo.ac.jp/gazo/gazo.html>

The Early Photographs Database at the Historiographical Institute at the University of Tokyo covers the same period as those of the above mentioned two image databases. However, the big difference from the other two is an inclusion of photographs of the Western peoples and materials obtained on the Iwakura Mission. The Early Photographs Database contains many portraits from notable figures in the late Edo through the Meiji era and is the only database that includes a photograph of Tokugawa Yoshinobu, the 15th shogun, among the three old photo databases introduced in this article. Viewing the database is free for academic purposes, but one must fill out an online database use application on each occasion of use. Various search methods include narrowing down by Japanese calendar, Boolean searches combining AND and OR, or simply clicking appropriate terms suggested on lists for objects, photographers, or photographic techniques. One can view thumbnail images, up to 100 photographs at a time. Both titles and photographers' names are assigned identification numbers within each category, and one can retrieve text information to describe the photo by clicking those numbers. The famous French photographer Nader, who took photographs from the air for the first time in the world, is included on the list. Among fifty of his photographs, all of which are made in Paris, a portrait of Fukuzawa Yukichi on his visit to Europe on the first Japanese mission to the Western world is also included. Unfortunately, however, the



database seems to lack a thesaurus control. Thus despite many portraits of Japanese in formal warrior outfits photographed by Nader, only one photo appears under “*bushi*” (warrior), and no results under “samurai” whether in hiragana, katakana, or Chinese characters.

Peace Database (Hiroshima Peace Culture Foundation)

<http://www.pcf.city.hiroshima.jp/peacesite/Japanese/database/database.html>

The merit of digitizing photographs may not be restricted to mere preservation in archives but can also function as a sort of historical testimony to relay messages of understanding to others through multimedia. The Peace Database developed at the Hiroshima Peace Culture Foundation is a multimedia database consisting of various types of information in text, image, and audio to reflect an entreaty for the abolition of nuclear weapons. To con-

vey the reality of atomic bombing, which has been fading from our memory after half a century, as well as to contribute to research on world peace, the database exhibits over the Internet 12,000 items housed at Hiroshima Peace Memorial Museum. Maximizing the impact of photographs as a message communicator, the site is an attempt to transmit Japan’s hope for world peace, as the only nation to have suffered from the atomic bomb. In addition to photographs, the database also contains videos on victims’ testimony, interviews with victims by the US Strategic Investigation Team, and atomic bomb documentary films. Bibliographical information with 20 fields is comprehensive and description of the items is thorough enough so that one can enjoy advanced combination of search terms with AND and OR functions. In addition, sorting in both ascending and descending modes is available as well.

While photographs printed on paper deteriorate as time goes by if moisture and temperature are not maintained at certain levels, digital photographs, though not perfect, do not fade in color because images consist of pixels. In addition to the immediate advantages of prevention from deterioration, damage, and physical loss, the search function of the database enables expansion of the use of image information and easy downloading of historical photographs. There seems to be no doubt that digital photographic databases will serve brilliantly to further develop the printing revolution in the 21st century and the concept of the digital library.

