

Cartographic Collections

Building a Web Site at the University of Chicago Map Collection

Christopher Winters

*Bibliographer for Anthropology, Geography, and Maps
University of Chicago Library*

The University of Chicago Map Collection's Web site (at <http://www.lib.uchicago.edu/e/su/maps>), launched in 1994, at first included little more than a description of the Collection and a few links to major reference sources. It is now one of the most elaborate university map library Web sites. These paragraphs describe how it acquired its current form. The first major addition to the Web site was a set of locally compiled GIS maps of Chicago. The mid-1990s were the period when the Map Collection's still-new GIS facilities were serving an unusually large number of patrons. It was clear from the beginning that not everyone needed the personal attention that library GIS requires. Most local users were primarily interested in the Chicago area, and many simply wanted a map of ethnicity or income of the sort one could easily find for earlier decades in atlases such as the *Urban Atlas* series. We had set up our GIS facilities so that we could produce such maps quickly, but, to obtain these, patrons still had to visit in person. We turned to Web as way to serve this series of maps to its patrons? In 1995, we put together what amounted to an urban atlas of Chicago in 1990, and it was an immediate success, garnering thousands of users a month, attracting more hits in one month than the library's online catalog.

As part of their work with patrons of its GIS facilities, Map Collection staff had created several specialized Chicago files, e.g., for Chicago ward and community boundaries that were not then available from any other source. Because many users were interested in historic GIS data not then easily available at all Map Collection staff also constructed a 1980 census tract boundary file of Chicago from the 1990 files, persuaded the local social science computing group to generate data from its archive, and put together some maps showing changes in Chicago in the years from 1980 to 1990. These files were also added to the Web site, as were the results of a cluster analysis of 1990 census data.

When the first 2000 Census results were released, Map Collection staff added similar maps to a separate set of pages, including, in 2003, a statistical analysis of

Chicago social data. Eventually, we added all our data sets as well.

Plans by the Digital Library Development Center to add scans of material in the Collection were delayed. As a result, high-quality, clear images of large files were not immediately available. Eventually, in 2005, we added Zoomify, software that allows the display of large files not by compressing them, as MrSID does, but by breaking them into thousands of small jpg files. One disadvantage is that it does not create downloadable compressed files.

Map Collection staff took advantage of the availability of Zoomify to put scans on the Web of one of the many local products in its holdings: a set of maps produced by the Social Science Research Committee (SSRC) portraying Chicago on the basis of 1920, 1930, and 1934 Census data. These maps, the result of work by scholars associated with the Chicago School of Sociology, arguably constitute the first atlas of any U.S. city. The Map Collection held a set of fairly pristine copies of these. Unfortunately, other available copies of the maps published in book form were nearly unusable. Since the maps mostly dated from the years after 1922, permission had to be obtained to use them. Because the SSRC no longer existed, it was not clear who owned the copyright. After considerable discussion with University lawyers and other parties, permission from the Department of Sociology, arguably the closest descendent of the SSRC, was deemed sufficient. This permission was readily given.

We have added more Web pages in the last couple of years, focusing again on materials not widely held that would form reasonably coherent groups for distinctive Web pages. Inevitably, most of the items chosen for inclusion were acquired during the Collection's most ambitious and best-funded collecting years, the late 1920s and 1930s, when material from the late nineteenth and early twentieth centuries was the focus of acquisition efforts.

In planning work on the Web site, we have had to keep labor costs in mind. The Map Collection may have the smallest staff in proportion to its size of any large university map library in North America. Only limited help was available from elsewhere in the Library. The kind of encyclopedic, large-scale projects that the Library of Congress and David Rumsey have undertaken would not have been possible even if the Collection's holdings justified that kind of effort.

All of the additional Web pages created focused either on Chicago or on other urban maps. A group

of Chicago maps from the 1890s and an anthology of social science maps of Chicago were added in 2006. A set of Chicago maps from the early years of the twentieth century and a collection of late nineteenth/early twentieth-century maps of Asian cities were added the following year. Recently we have created pages devoted to Chicago maps from the period of the Fire (1871) and late nineteenth/early twentieth-century maps of Latin American cities.

Dealing with the earlier maps has required a surprising amount of hands-on physical effort. Many of the maps are very large, some are in poor shape, and most had been encapsulated. It took quite a lot of fiddling with the scanner to create reasonably good images of these maps. The machine fell out of calibration easily; bits of map and ink could get caught in the roller and cause streaks; and reflections from the Mylar of encapsulated maps turned out to be a major problem. (We ended up de-encapsulating several sheets.)

All of the maps are cataloged both on OCLC and in our local catalog. Local cataloger Renette Davis had served on the committees that established the protocols for the Digital Library Federation/OCLC Registry of Digital Masters, and we attempted to follow its guidelines, adding not only URLs to the records but also information on the technical standards employed in digitization and limitations on access.

In coming years anthologies of African urban maps and, if permission can be obtained, maps produced

by local government agencies in Chicago in the 1920s and 1930s are logical candidates for inclusion. It would also be desirable to find some way to add download capability, at least of medium-quality images of material unambiguously out of copyright.

Over the last year the Web site has been getting more than half a million hits a month, if jpgs and gifs are included in the count, and about 25,000 hits a month if they are not. The first figure exaggerates usage, since the counts multiply quickly given that the Zoomified files consist of hundreds of tiny jpgs. But the second figure may under-count, since the jpgs and gifs are the major point of the Web site. The first figure amounts to more than half the usage of subject-specific Web sites at the University of Chicago Library, the second about 15 percent, still the most-used pages on the Library site. The figures are all the more striking in that map libraries do not usually come in first in usage statistics. Perhaps the problem all along has been not a lack of demand for cartographic material, but the process by which map libraries have had to quickly adjust to deciding how maps are best integrated into web-based services to adequately serve the needs of its patrons. I'm really delighted that the University of Chicago Map Collection has been able to take advantage of a new medium to share some of its resources with a wide audience.

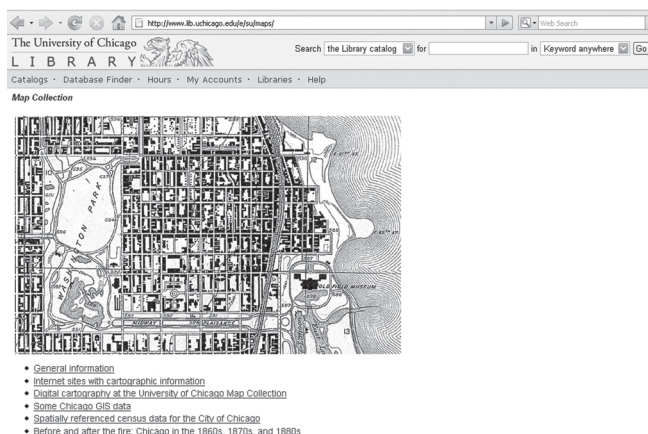


Figure 1. Screen shot of the University of Chicago Library Map Collection home Web site. (see page 94 for color version)

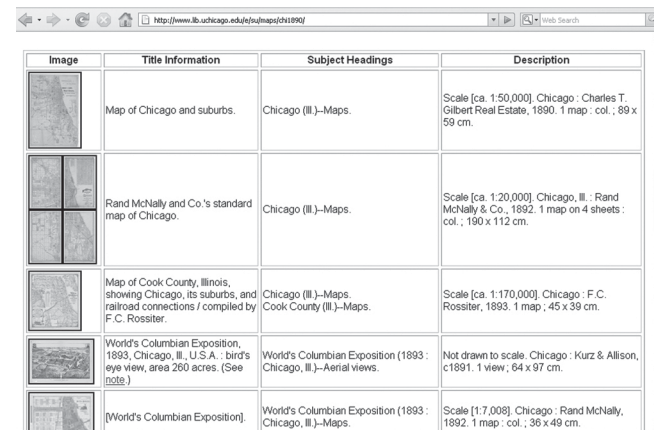


Figure 2. Screen shot of University of Chicago Library Map Collection online index with metadata fields. (see page 94 for color version)

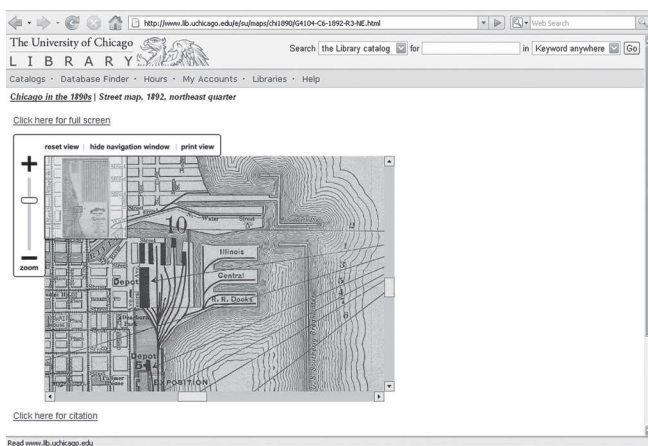


Figure 3. Screen shot of University of Chicago Library Map Collection online map of Chicago showing Zoomify capabilities. (see page 94 for color version)

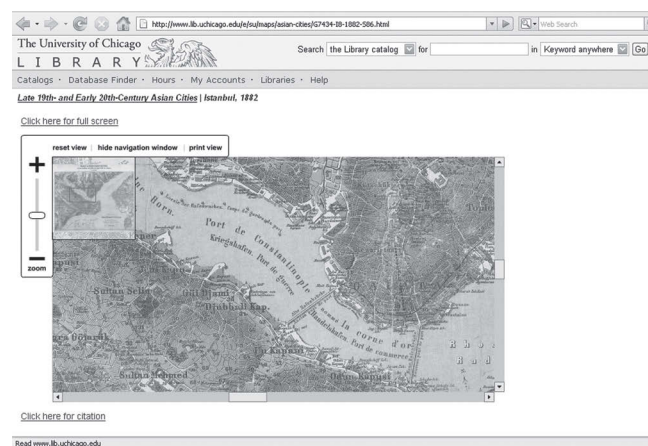


Figure 4. Screen shot of University of Chicago Library Map Collection online map of Istanbul showing Zoomify capabilities. (see page 94 for color version)

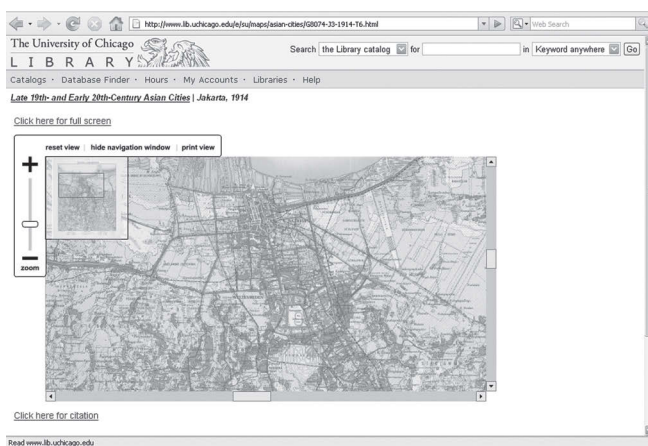


Figure 5. Screen shot of University of Chicago Library Map Collection online map of Jakarta. (see page 94 for color version)