Carto-bibliography on the Web: Links Combining Text and Image

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The list of websites providing textual carto-bibliographic information for early maps continues to grow.1 The same may be said for sites providing early-map images of varying quality. At present, the Map History website (www.maphistory.info) maintained by Tony Campbell records more than 1,200 image-containing websites and provides the only readily accessible online attempt at such a comprehensive inventory.2 The number of sites providing reliable text coupled with associated imagery, however, is quite small, particularly if one requires the capability for adjustable resolution. The sites reviewed here comprise the larger and more authoritative ones that link carto-bibliographic description with high-quality, manoeuvrable images.

Scholars and map enthusiasts alike, who flock to the web for academic and general information, demand diverse and sophisticated content, preferably at little or no cost.3 While a number of impressive printed carto-bibliographies have appeared within the past decade, these are often beyond the financial reach of many individuals and libraries, even those with significant cartographic holdings.4 The drive to provide some sort of online access to cartographic and other collections is inexorable. And in the future those institutions not posting holdings to online catalogues run the risk that their collections will be hidden from public view, hence increasingly marginalized in terms of use.5

Along with the need for easier online access to collections is the desire for the capability to search across multiple sites simultaneously, using a simple search interface, often in association with natural language, avoiding reliance on complex thesauri.6 The rise of Google and Google Scholar (scholar.google.com) has certainly been central in feeding this demand, as have more overtly commercial sites such as Amazon.com. At present, however, no meta-search engine can access the major sites that provide combined textual description and linked images for early maps. Specifically, there are almost no meta-search facilities for databases focused on early maps that are comparable to those available for books, such as WorldCat, the Karlsruhe Virtual Catalogue (KVK), or Bibliothèque nationale de France’s Bn-Opale Plus. The only exception, providing access to more than 220,000 textual descriptions, is the Staatsbibliothek zu Berlin’s IKAR database of old maps.

A review of the sites listed at Map History (http://www.maphistory.info/webimages.html) and other locations indicates that at least eight sites link skilfully compiled carto-bibliographic entries with corresponding early-map images. Seven of these are publicly accessible at no charge. At these sites, a manoeuvrable image is linked to at least a basic

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enumerator bibliographic description from a reputable source. This is not to say that other sources do not exist, but the focus here is on larger, better known sites that also provide standardized cataloguing entries. Large institutions capable of the sustained commitments required to maintain services over time oversee these locations. It is beyond the scope of this article to review the many smaller collections that may be posted around the web.

**The Eight Map Sites**

*WorldCat*, using FirstSearch, requires paid subscription access via a major library or other participating institution, although individual subscriptions are also available. *WorldCat* is the meta-catalogue for OCLC (Online Computer Library Center: www.oclc.org/), and FirstSearch is the name of the applicable search-engine. Map images have links to some of the master records and are generally derived from two main sources: online raster images via the American Memory site of the Library of Congress and images maintained by the David Rumsey Map Collection. Recently, links to early-map images from a few other special collections, including Harvard and Wichita State universities, have appeared in *WorldCat*. The American Memory and the Rumsey sites are discussed separately below. The public and freely accessible retrievals of *WorldCat*.org do not yet provide the image links available with the master records accessed using the subscription FirstSearch option. Links to individual items catalogued in *WorldCat* do not show up in random Google searches, contrary to the other seven sites considered. It is possible to limit *WorldCat* searches specifically to maps, but not just to maps with images.

*American Memory Maps* of the Library of Congress (http://memory.loc.gov/ammem/gmdhtml/ListSome.php?category=Maps) was developed as a collaborative national project, with the help of numerous large institutions. Although heavily slanted towards maps pertaining to the United States and its history, some other areas are represented. The ten individual map catalogues are generally searchable by keyword, and browsable by subject, title or geographical indexes. Images are in JPEG 2000 format, and zoomable. Links to these maps appear within retrievals from *WorldCat*’s FirstSearch and the KVK catalogue.

The *David Rumsey Map Collection* (www.davidrumsey.com) is a large, growing and increasingly well-known site that now boasts nearly 16,000 high-quality, manoeuvrable images online. The main focus is on North and South America, although other areas of the globe are certainly represented. Cartography Associates, the private entrepreneurial group responsible for maintaining the online Rumsey collection, also supports the more expansive Visual Collections Cartography site (www.davidrumsey.com/collections/cartography.html), which links to holdings in several other map collections. As noted above, *WorldCat* allows links to the main Rumsey map-images and includes carto-bibliographic entries specifically catalogued as electronic resources. Rumsey’s site has several options for browsing the images, the simplest of which is the Insight Browser that functions in conjunction with most major web browsers. Links to Rumsey images appear within *WorldCat* FirstSearch retrievals but not from a KVK search.

*Gallica–BNF* (http://gallica.bnf.fr/) from the Bibliothèque nationale de France is an impressive site particularly strong, as would be expected, in cartographic images from the eighteenth century French Enlightenment. It is readily searchable by cartographer (author), subject and title. The images are easily manoeuvrable with Zoomify technology, operating within most standard browser windows. The search may be configured to show the image with or without the corresponding carto-bibliographic entry. In addition to the general search, there is also a specific and extensive collection pertaining to the works of Jean-Baptiste Bourguignon d’Anville (more than 3,000 items).

*National Library of Australia DigitalCollections Maps* (www.nla.gov.au/digicoll/maps.html) site now boasts nearly 7,000 maps online, mostly from the eighteenth century onward. As would be expected, its predominant strength relates to Australia, but elements are also applicable to other parts of the world. As one example, a 1659 sea atlas by Hendrick Donker has been fully digitized. Advanced search capabilities employing Boolean operators are present, including the ability to restrict the search to maps.

*National Library of Scotland Maps* (www.nls.uk/maps/) presents an expansive collection, which is almost exclusively focused on Scotland between the sixteenth and twentieth centuries. It presents a wide range of materials, such as general early maps, Pont’s maps, eighteenth-century military maps (including William Roy’s survey), nineteenth-century Ordnance Survey town plans, twentieth-century Ordnance Survey grid map indexes, and bathymetrical surveys of the freshwater lochs from the late nineteenth and early
twentieth centuries. The site is searchable and browsable, with zoomable images.

National Maritime Museum, Collections Online, Charts and Maps (www.nmm.ac.uk/collections/explore/index.cfm?category/charts) contains nearly 2,000 individual maps and charts and is searchable and browsable. The searchable charts include those of Joseph Frederick Wallet Des Barres’s four-volume Atlantic Neptune, produced during the era of the American Revolutionary War, from the Henry Newton Stevens Collection. The catalogued image variants of each chart are shown, with corresponding text entries explaining the differences.

New York Public Library Digital Gallery, History and Geography (http://digitalgallery.nypl.org/nypldigital/index.cfm) is a collection focusing predominantly on North America and the environs of New York. It can be browsed or searched by online collection: Charting North America: Maps from the Lawrence H. Slaughter Collection and Others; Early Real Estate Atlases of New York; Picturing America, 1497–1899: Prints, Maps, and Drawings bearing on the New World Discoveries and on the Development of the Territory that is now the United States.

Looking to the Future

It is likely that prominent meta-search sites will continue to encourage and expand the use of carefully constructed image links. Such a task is not simple in terms of time, logistical support and expense, but linking text and image is ultimately advantageous for scholars, researchers and serious enthusiasts. Digital surrogates can aid in the search for, and screening of, early-map material and can minimize the need to handle valuable and fragile originals. Digital surrogates, however, no matter how sophisticated, cannot always be a satisfactory substitute for the original document, and in some cases the surrogates will help researchers to identify when visits need to be made to a library or to exclude pointless ones.

Smaller libraries may eventually be able to add their holdings to centralized image repositories that are linked to some standardized carto-bibliographic format, thereby laying the foundation for a ‘union catalogue’ of digital images of early maps. Although there is no indication that any such centralization will become a working reality within the next few years, OCLC is in the midst of a pilot project to develop an automated digital image archive searchable via FirstSearch (http://www.oclc.org/digitalarchive/default.htm).

The focus in this paper on online digital carto-bibliographies is not to be taken to suggest that the contributions of major printed carto-bibliographies of early maps should be minimized, still less excluded; printed and digital resources are complementary. Budget constraints, however, can make it difficult for any single library to maintain access to both resources. What libraries and their users need are high-quality and wide-ranging reference sources that can be made available through the Internet at reasonable cost. The expansion of and access to such electronic resources would also enhance capabilities for distance instruction in the history of cartography.


NOTES AND REFERENCES

1. Online Computer Library Center’s (OCLC) WorldCat is accessible in paid (FirstSearch) and public (WorldCat.org) modes. The latter is being steadily expanded, although the function of the former is greater (for differences, see http://www.bcr.org/publications/bcreview/2006/09/worldcatorchardtaria.pdf). Another free meta-search engine is the Karlsruhe Virtual Catalogue (KVK) (http://www.ukba.uni-karlsruhe.de/hylib/en/kvk.html). Also see the Newberry Library Cartographic Catalog (http://www.biblioserver.com/newberry/) and the IKAR database of old maps (http://ikar.sbb.spk-berlin.de/allgemeines/english.html).

2. The sites listed on Map History are of variable quality, and the discussion in this paper is primarily confined to large general sites. One large collection not included here is the University of Berne’s Ryhiner Map Collection (http://www.stub.unibe.ch/stub/ryhiner/collection/progress.html). This was a personal decision, based on the limited resolution and manoeuvrability of many of their images.


5. For an overview see the articles in RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage (formerly


8. The idea of union catalogues for digital images is not new. For a conceptual overview, see Angela Giral, ‘Digital image libraries: technological advancement and social impact on the teaching of art and architectural history’, INSPEL 34:1 (2000): 9–21, accessible online at http://www.ifla.org/VII/d2/inspel/00-lgian.pdf. The development of collaborative repositories would also allow for some component of standardization under the auspices of professional catalogueurs, bibliographers and those skilled in the technical construction of digital libraries.

