

## **SEARCHING FOR EARLY MAPS: USE OF ONLINE LIBRARY CATALOGS**

**by Joel Kovarsky** © 2010-2011

(Email comments and suggestions to Joel.Kovarsky[at]embarqmail.com. Originally posted online on 18 October 2010; last revised 3 August 2011.)

### **Introduction**

The past fifteen years has seen an explosion in the ability to search online library catalogs for a variety of materials, including early maps: this is old news. The purpose of this discussion is to summarize the major existing online catalogs for researchers, librarians, archivists, collectors and dealers—all of whom are increasingly dependent on the web for a variety of informational functions. The larger search sites are already international in scope, with searchable holdings mainly contributed by North American, European, Australian, and Asian libraries. There will unavoidably and understandably be some overlap in citations retrieved via several of the systems discussed below, because an individual library or group of libraries may end up being indexed by more than one search option. This should be particularly apparent with the use of meta-search engines employing [Z39.50](#) technology. It is beyond the scope of this article to detail the specific areas of overlap.

Many readers will already be familiar with the notion of “hidden collections,” i.e. holdings whose bibliographic descriptions have not yet been loaded into “online public access catalogs” or OPACs. What is increasingly appreciated is that even these freely accessible online catalogs may be hidden, if not included within the scope of a larger, multi-institutional search engine.

These search facilities not only provide basic information about a library's early map holdings—and here we are mostly discussing printed maps from the 15<sup>th</sup> to 20<sup>th</sup> centuries—but can facilitate a decision as to whether a researcher might plan a trip to the physical library. Like it or not, these online searches will often be key initial steps in determining whether a visit to a particular institution is deemed worthwhile. Serious researchers will, however, find online catalogs inadequate for many tasks: large amounts, if not the majority, of map material is still not indexed via online search engines. It is not simply an issue of uncataloged material, since much of what is “hidden” from the OPACs does appear in local card (for example those available at the American Geographical Society Library or Royal Geographical Society) or electronic catalogs, which may not yet be integrated with the search options discussed herein. Some libraries have their own printed catalogs of holdings in various collections, but again, the focus of this article is the available OPAC options.

When available, I generally recommend use of advanced search pages, which often allow more precisely tailored queries in terms of formats, date ranges, specific collections, etc. The first three options discussed below (KVK, WorldCat and IKAR) are, in my opinion, the most useful general sites for beginning a broad-based online search for early map holdings. These selections are admittedly somewhat arbitrary and based on my own experiences. Expert researchers focused on a myriad of queries, with any number of specialized needs, will have their own preferences for scanning online sources. Sorting overlapping cartobibliographic entries between various major national and international sites is beyond the scope of this work.

Many of the search engines described here have help sections, which should be reviewed by people not already familiar with a specific interface and its capabilities, since these can vary significantly from one site to another. Rather than entering a lengthy map title, it is usually best to use a short, initial portion, thereby minimizing spelling problems or the possibility that a cataloger may have entered an incomplete title. Some familiarity with [early letter forms](#) is helpful. For example, a “v” in an early Latin title may have been transposed to the more modern “u.” Not all catalogers indicate both the early and modern forms of those spellings, which could alter the results of a search within an OPAC. The use of tools such as [Boolean and adjacency operators, proximity operators, and wildcard and truncation symbols](#) can vary from one engine to the next.

Discussions of the technical details of machine-readable cataloging ([MARC](#)), its [bibliographic formats](#), or cataloging standards such as the [Anglo-American Cataloging Rules](#) and the recently introduced Resource Description and Access ([RDA](#)), are beyond the scope of this discussion. Although all OPACs do not employ AACR2 (some of which will gradually convert to RDA) cataloging standards, standardized formats are of major importance for the development and maintenance—often over periods of many years—of multi-national and multi-institutional search engines.

### **[Karlsruhe Virtual Catalog \(KVK\)](#)**

The KVK catalog, hosted by the Karlsruhe Institute of Technology in Germany, is currently the most expansive meta-search option on the web. It actually accesses several of the search options discussed below, including the freely accessible version of [WorldCat](#). The KVK catalog does not actually have its own online holdings: it is a meta-

search engine employing [Z39.50](#) technology to search across a diverse and geographically dispersed group of major online catalogs from over twenty countries, several with more than one library catalog system. The KVK catalog currently has access to over five-hundred million bibliographic records, including maps.

The main search page is available in English, French, German, Italian and Spanish. It is set up with a check-list of accessible major library catalogs, which can be selected as needed for an individual search. There are also direct links to each of the individually itemized catalogs. The search results then appear with links to the descriptions within those individual online catalogs. Like with any meta-search facility, sometimes searches may be incomplete for a number of reasons, including malfunctions at the primary library catalog, or processing delays (especially since so many library catalogs can be scanned simultaneously). There is a general [help page](#), in German only, which may be useful to some not already familiar with the system. The KVK database is not geared to the display of map images.

### [WorldCat](#)

WorldCat is the global catalog of the Online Computer Library Center ([OCLC](#)). It the largest catalog where the descriptions are held within a single database, and currently indexes nearly two hundred million bibliographic records. Member libraries can create new bibliographic entries (i.e. a new master record) within the database, or link to an existing master record (so-called copy cataloging). Although there is heavy emphasis on North American library holdings, there are records in nearly 500 languages from over 100 countries and territories. Most of the members of the Association of Research

Libraries ([ARL](#)) have their web catalog holdings represented within WorldCat. There is a searchable online list of [participating institutions](#); this does not mean that all of an individual library's holdings are indexed within WorldCat. New libraries continue to join the consortium; new holdings are continuously added to the catalog.

There are four current interfaces making use of the WorldCat database: FirstSearch, WorldCat.org, WorldCat Local, and WorldCat Mobile. FirstSearch and WorldCat Local require paid subscription access. The link provided at the head of this section goes to the advanced search page of the freely accessible version of WorldCat. That interface is also available in several languages, including Dutch, English, German, French and Spanish. A general [help page](#) is readily accessible. The free version is becoming consistently more expansive its search and retrieval capability, and like the paid version has the ability to display libraries holding copies of a particular bibliographic record. Its keyword function is an "any word" search, contrary to a more limited function within the subscription version of WorldCat via the [FirstSearch](#) interface.

The paid interfaces have some advantages relative to the freely accessible versions. One of these is that the subscription versions of WorldCat (including FirstSearch and WorldCat Local below) retrieve more detailed bibliographic information, a necessity for many researchers. [Note: See the "sample search records" at the end of this presentation for an example of the variability of records that can be seen with various search options.] Image links (either to entries cataloged as physical or electronic records), when available, appear within the paid versions, but are not yet accessible within the free options. Also, the subscription version has some advantages via its advanced search functions, including a drop-down option to specifically search for a publisher, and greater capacity to limit

formats and date ranges. Many of these issues are already known by expert searchers, and serve to emphasize the added capabilities of subscription versions of WorldCat.

Another more recent entry into the paid subscription options for accessing WorldCat is [WorldCat Local](#). For those subscribing institutions, it allows their holdings to be displayed at the top of any search query. There is one caveat here: as is the case for the FirstSearch interface, the record shown in that search will be the master record for the individual bibliographic entry, not necessarily the record that might be retrieved if directly searching the holding institution's own online catalog. Adding the latter step is obviously more time consuming, but has the advantage of showing local notes for the record (again, see "sample search records" below), thereby obtaining bibliographic details not accessible using the freely accessible version of WorldCat. In addition, WorldCat Local can simultaneously interface with quite a number of [additional search options](#) within an individual library. Hence this becomes a meta-search option.

[WorldCat Mobile](#) is another recently developed function to allow searches from certain wireless phones.

There are some map image links to individual bibliographic entries of the paid versions of WorldCat. A few of those display within the free version (those images uploaded within OCLC's own image database). At the present time, fewer than 15% of the nearly four million map listings have links to images. There is no master list of institutions providing images links, and no specific criteria (other than OCLC membership) for links to be included within a map record. Several major digital map libraries (see below) have image links within WorldCat, including American Memory,

David Rumsey Map Collection, Gallica, Harvard Map Collection, National Library of Australia, and Ryhiner Collection.

### **IKAR OLD MAP DATABASE**

This database, a [collaborative project](#) of several major German Libraries initiated in 1985, contains over 250,000 textual bibliographic records of printed maps produced up to 1850 (manuscript maps are specifically excluded). The database currently indicates fewer than 1500 image links, but this may expand over the years. Several of these libraries are also represented within the OCLC consortium, although the IKAR description may not appear within a WorldCat search for a map having a pre-existing master record. The map database search engine is accessible via the [GBV Union Catalog](#), with the interface being available in German and English (note the copyright notice for OCLC on the interface page). There is a general link to this union catalog within the KVK interface, although that leads to the whole online GBV Union Catalog, not the more focused map database link noted herein. There is, obviously, heavy weighting of the database in terms of early German and general European material.

### **OTHER DATABASES FOR EARLY MAPS**

The [Newberry Library Cartographic Catalog](#) contains over 70,000 listings out of estimated library holdings of over 500,000 maps. This catalog is distinct from the library's [main online catalog](#), although there is some duplication of bibliographic entries between the two. The main catalog holds quite a number of cartographic titles not included in the more focused cartographic catalog, and the library's cartographic holdings

are not all indexed within WorldCat, as is the case with several of the individual library databases discussed in this section.

[AMICUS](#) is the free, online, meta-search catalog for over 1300 Canadian libraries, including the Library and Archives Canada, with over 30 million bibliographic entries, including maps. Like the KVK catalog discussed above, it also uses [Z39.50](#) technology. It is also searchable via the KVK catalog (as the Canadian Union Catalog). The cartographic materials therein understandably have a heavy North American focus. Their advanced search page does not currently have an option to limit the format to maps. [Free registration](#) may provide some additional functionality.

The [David Rumsey Map Collection Database](#) has over 22,000 freely-accessible map images and corresponding detailed cartobibliographic records online. The images are high-resolution and easily maneuverable. The main focus of the collection is eighteenth and nineteenth century maps of North and South America, although other areas are included. The physical collection, representing over 150,000 maps, has been donated to Stanford University. Current plans are to keep the website as an open-access resource. Most of the entries in this database appear as electronic cartographic resource entries within WorldCat, with corresponding links to the images within Rumsey's database.

Several national geographical societies have portions of their holdings searchable online. Some of the holdings of the American Geographical Society Library (AGSL) are searchable via [PantherCat](#), the OPAC of the University of Wisconsin Milwaukee, which is also indexed via WorldCat. Many of the AGSL's older map holdings, described in a local card catalog, are not searchable online. The AGSL has a separate [digital map collection](#), featuring roughly 500 maps, accessible online. The collections of the [Royal](#)

[Geographical Society](#) (RGS) have over two million documents, including maps, and as with the AGSL, many of the map descriptions are not accessible via the online catalog. The holdings of the RGS are not searchable via either the KVK catalog or COPAC (see below).

The [Union Catalog](#) of the Huntington Library, Pasadena Museum of History, and Altadena Historical Society Map Collections is hosted by the Huntington Library, and is made freely available via a link through the website of the California Map Society. The catalog contains over 3700 detailed bibliographic entries with low resolution images, which are not within WorldCat.

The American Philosophical Society maintains [Realms of Gold](#) [A Catalogue of Maps in the Library of the American Philosophical Society](#), with nearly 1800 bibliographic entries. Some digital images are provided. This catalog does represent the bulk of their early map holdings.

The Hargrett Rare Book & Manuscripts Library of the University of Georgia maintains a [Historical Maps Database](#), with bibliographic entries for over 1,000 maps emphasizing the colony and state of Georgia. The coverage spans almost five centuries, from the sixteenth to early twentieth centuries. Other cartographic holdings are searchable within the more general [GIL@Hargrett catalog](#).

The [William C. Wonders Map Collection Database](#) of the University of Alberta Libraries is an online bibliographic catalog of these maps from the [early eighteenth century through 1994](#). Other cartographic materials are cataloged separately in their [NEOS catalog](#), which is indexed within AMICUS and WorldCat.

The [Maritiem Digitaal collection](#) is a project of a museum consortium in The Netherlands, and has some cartographic materials that are not indexed within other major European Union Catalogs (such as IKAR). Most of those more expansive European catalogs are searchable via the previously discussed [KVK catalog](#).

Several of the largest online catalogs for searching for early cartographic material—the [Library of Congress](#), [Gallica](#) (Bibliothèque nationale de France), and [The British Library](#)—are easily searched within the KVK or WorldCat catalogs. [COPAC](#) is an online catalog merging those of [numerous research libraries](#) within the United Kingdom, and is also searchable via the KVK catalog. There is an online site, hosted by the University of Queensland, which lists [national library catalogs](#) worldwide. The [European Library](#) offers access to the online resources, including map descriptions, of nearly 50 national European libraries from 35 countries, representing members of the [Conference of European National Libraries](#). This latter group also maintains its own online search portal, [Europeana](#), with links to roughly six million digital items, including maps. A number of these libraries' online cartobibliographic records are indexed within the KVK and WorldCat catalogs discussed above.

Other potential resources for finding early map materials include the major national archives. Two of the largest are the National Archives of the [USA](#) and the [United Kingdom](#), although many of their sources are not easily searched online. [ARCHIVENET](#), a project of the Historical Centre Overijssel, is useful for locating online information on various national archives worldwide. More specific, locally relevant materials may be available from various USA [state archives](#). Additional online information pertaining to [Map Collections](#) is maintained via the [Map History/History of Cartography](#) gateway.

There are many other, generally smaller, online catalogs for searching individual library collections that I have not discussed here, in part because of space, and in part because they are not yet known to me. Map collections held by smaller, private libraries are often not searchable via various national and international online catalogs.

### **DIGITAL LIBRARIES OF EARLY MAP IMAGES**

There has been a rapid growth in sites featuring digital images of early maps, and an expansive list of several thousand may be seen at the [Images of early maps](#) site, maintained by Tony Campbell within the [Map History/History of Cartography](#) gateway. It is beyond the scope of this brief report to review all the pros and cons of these sites, but it is apparent that there is a great deal of variability in the quality of both the images and the cartobibliographic descriptions associated with the individual images. For these reasons, I am simply providing links below to an alphabetical list of nineteen of the larger, mostly general, sites focused on those with better map descriptions and high-resolution, maneuverable imagery. Some of these have already been discussed above, and some of the descriptions therein are already searchable via some of the online options already discussed.

- [Afriterrra: The Cartographic Free Library](#)—maintained by the AFRITERRA Foundation, a non-profit Cartographic Library and Archive assembling and preserving the original rare maps of Africa. Entries here are slowly being integrated into WorldCat.
- [American Memory Map Collections](#)—maintained by the Geography and Map Division of the Library of Congress.

- [Archive of Early American Images](#)—maintained by the John Carter Brown Library.
- [Bibliothèque et Archives nationales du Québec](#)—maps and plans.
- [David Rumsey Historical Map Collection](#)—this catalog focuses on late 18<sup>th</sup> and 19<sup>th</sup> century American material.
- [DigMap](#)—maintained by a [consortium of European libraries](#). There are other attempts to develop federated search engines that focus specifically on early map images, but none are yet at a stage that can be recommended as a starting point for a general search.
- [Gallica](#)—maintained by the Bibliothèque nationale de France.
- [GeoWeb](#)—maintained by the Biblioteca Nazionale Marciana in Venice.
- [Harvard Map Collections Digital Maps](#)
- [Historical Map Archive](#) (University of Alabama)—from sources including the University of Alabama Map Library, the W. S. Hoole Special Collections Library, the Rucker Agee Map Collection of the Birmingham Public Library, the Geological Survey of Alabama, Samford University Special Collections Library, and the Alabama Department of Archives and History.
- [Map Library of Catalonia](#)—maintained by the Institut Cartogràfic de Catalunya.
- [Nationaal Archief \(National Archives of The Netherlands\)](#)—map collections, including VOC charts.
- [National Library of Australia Digital Collections: Maps](#)
- [National Library of Scotland—Maps](#).
- [National Maritime Museum Collections Online: Charts & Maps](#)

- [Norman B. Leventhal Map Center at the Boston Public Library](#)
- [New York Public Library Digital Gallery—Charting North America](#): Maps from the Lawrence H. Slaughter Collection and Others.
- [Ryhiner Collection](#)—maintained by the University Library Berne.
- [Star Atlases, Charts and Maps](#)—provided and maintained by the Linda Hall Library of Science, Engineering and Technology, in Kansas City, Missouri.
- [Vision of Britain Through Time: Historical Maps](#)—supported by the Great Britain Historical GIS Project based in the Department of Geography at the University of Portsmouth.

### **SAMPLE SEARCH RECORDS**

As one example of the variability in the amount of detail displayed for the same map, below are three records—one from WorldCat.org (free version), one from WorldCat via FirstSearch, and another from the AMICUS catalog—of J.F.W. Des Barres' 1776 *A View of Boston Taken on the Road to Dorchester*. Although the results below will be no surprise to experienced researchers, one can readily see the advantage of detailed local notes (see AMICUS entry) over a WorldCat master record, for the example provided.

#### **WorldCat.org (free version)**

A view of Boston taken on the road to Dorchester [by William Pierrie].

Material Type: Manuscript

Document Type: Map, Archival Material

All Authors / Contributors: J F W Des Barres; William Pierrie (artist); James  
Newton

Find more information about: J F W Des Barres William Pierrie (artist) James  
Newton

OCLC Number: 538190126

Notes: There is one example of this view in the collection. Imprint May 30th  
1776.

Description: Single sheet, Engr. Plate impression 48 x 65.5cm.

### **WorldCat (FirstSearch)**

Title: A view of Boston taken on the road to Dorchester [by William Pierrie].

Author(s): Des Barres, J F W.

Pierrie, William (artist)

Newton, James.

Publication: London: Des Barres,

Year: 1776

Description: Single sheet, Engr. Plate impression 48 x 65.5cm.

Language: English

Series: The Atlantic Neptune;

Note(s): There is one example of this view in the collection. Imprint May  
30th 1776./ Reproduction: K0299

General Info: Coverage: Massachusetts./ Henry Newton Stevens collection.

Material Type: Manuscript (mss)  
Document Type: Map; Archival Material  
Date of Entry: 20050909  
Update: 20100303  
Accession No: OCLC: 538190126  
Database: WorldCat

**AMICUS No. 32664633**

Monograph

NLC COPIES: Carto - G1107.C6P5 D46 1779 v. 3 #27 1776

NAME(S):\*Des Barres, Joseph F. W. (Joseph Frederick Wallet),  
1722-1824

TITLE(S): A view of Boston taken on the road to Dorchester  
[cartographic material] : [Massachusetts] / drawn by  
Wm. Pierrie ; engraved by James Newton

PUBLISHER: [London] : Publish'd according to Act of Parliament ...  
by J.F.W. Des Barres Esqr., May 30th, 1776.

DESCRIPTION: 1 view ; 42 x 63 cm, on sheet 57 x 82 cm.

NOTES: Reference in source given: Henry Newton Stevens  
collection of the Atlantic Neptune, v. 1 #97; v. 3, p.  
216.

Reference in source given: Layng, Theodore E.

Desbarres collection, Map Division, Public Archives of  
Canada, p. 64 v. 4 #18[a & b].

ø™ @ Label pasted on verso has been removed and is  
loose in the folder: Vol. 4. No. 8. A view of Boston.

Watermark: Consists of a rectangle 7.4 x 6.7 cm  
enclosing a design of a bird. Superimposed on this is  
a square 3 x 3 cm surmounted by a conical top with a  
ball or ring and enclosing a bird. Stevens refers to  
it as a "double bird cage". On the opposite side are  
two lines of letters which cannot be deciphered.

ø™ @ "11b" in pencil in lower right corner.

RELATIONSHIPS: In: Des Barres, Joseph F. W. (Joseph Frederick  
Wallet), 1722-1824 Atlantic Neptune. London : Published  
for the use of the Royal Navy of Great Britain by  
Joseph F.W. Des Barres, Esqr. under the directions of  
the Right Honble. the Lords Commissioners of the  
Admiralty, 1777-1784.

In: Des Barres, Joseph F. W. (Joseph Frederick  
Wallet), 1722-1824 Atlantic Neptune. London : Published  
for the use of the Royal Navy of Great Britain by  
Joseph F.W. Des Barres, Esqr. under the directions of  
the Right Honble. the Lords Commissioners of the  
Admiralty, [1778]-1779.

CLASSIFICATION: LC Class no.: G1107.C6P5 D46 1779 v. 3 #27 1776

LC Class no.: G1107.C6P5 D47 1784 v. 4 pt. 2 #18 1776

SUBJECTS: Massachusetts--Boston--Views--Early works, 1751-1800--

Massachusetts--Boston--Vues--Ouvrages anciens,

1751-1800—

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