MARC and EAD: Making Archival Surrogates Usable and Accessible

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Outline

- **Background**
- **Research Questions**
- **Methodology**
- **Example Findings**
- **Conclusions**
- **Kudos**
  - **Funding**
    - **National Historical Publications and Records Commission (NHPRC)**
    - **Online Computer Library Center (OCLC)**
  - **Jihyun Kim and Rebecca Tremaglio**

Manifesto #5: The real purpose of computing is to let people take part in shared representations.

(Malcolm McCullough, Assoc. Professor of Architecture, University of Michigan)

Research Questions

- **Are there Shared Representations in Archival Material Presented Online?**

- **Why is "Taking Part" in these Representations and Primary Source Research so Difficult?**

Research Questions

- **How to users make sense of archival surrogates?**

- **How to researchers use surrogates to help solve problems using primary sources?**

- **What design features do researchers use? And how well do they use them?**

- **What functionalities do users want to assist them in their work**

Purpose

- **Understanding more about use of archival materials**
  - **Search patterns and strategies of researchers using primary sources**
  - **How people think about solving primary source research problems**
  - **Identification of optimal search strategies**
- **Usability**
  - **Usability concerns the interface design, the content, and the functionalities of the system**

Methodology

- **Experimental design**
  - **Laboratory Setting**
- **Pre-test questionnaire**
  - **Demographic data**
  - **Library experience**
  - **Archival experience**
  - **Computer skills (self-rated)**
- **Usability Test**
- **Post-test interview**

Participants

- **Four groups**
  - **Undergraduates**
  - **Experienced archival researchers**
  - **Genealogists**
  - **Academic reference librarians**
- **Compensated $25 per experiment**
- **Approved by the UM Institutional Review Board**

Interfaces

- **Online Catalogs**
  - **Mirlyn, University of Michigan**
  - **Library of Congress, OCLC**
  - **Library of Congress, RLG**
  - **RLG**
  - **OCLC**
- **EAD Sites**
  - **Online Archive of New Mexico**
  - **Bentley Historical Library**

Four Usability Tests

- **Each builds on the other to understand different dimensions of how researchers utilize and make sense of archival representations**
  - Static MARC records
  - Searching online catalogs
  - EAD finding aids
  - Online catalogs to EAD finding aids

Testing

- **Archival knowledge**

- **Searching skills**

- **Usability features**

Piloting the Usability Tests

- **Assessing the feasibility of the questions**
- **Refining the questions**
- **Making sure the questions tested what we intended**
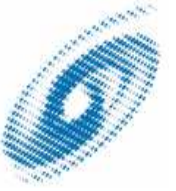- **Timing**
- **Managing the level of difficulty**

Data Capture

- **Videotape**
  - **Audio**
  - **Video**

- **Keystroke capture**
  - **Camtasia (also does back up audio capture)**

- **Researcher notes**

Static MARC Records

- **Users are presented with 2-5 screens with archival MARC records from different online catalogs and asked a series of questions**
  - **Focus: whether or not any of the records on the screens represented the same underlying collection**
- **How much do users understand about archival MARC records?**
- **Eliminates searching from the equation**
- **Undergraduates and Expert Archival Researchers**

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Static MARC Records Tests

- **Archival knowledge**
  - **Ability to recognize key information elements**
    - **Author**
    - **Title**
  - **Understanding of key information elements**
    - **Dealing with inconsistencies between records**
- **Usability**
  - **Placement of information**
  - **Presentation of data elements**

EAD Finding Aids

- **Undergraduates and Academic Reference Librarians**
- **Presented with a series of scenarios / tasks in two interfaces**
- **Tasks based on interviews and observations with researchers.**
- **Task goals include:**
  - **Filling out a call slip**
  - **Utilizing various search delimiters**
  - **Generating terms for subject searches**
  - **Selecting / identifying suitable collections to answer the question**
  - **Identifying archival information**
  - **Linking to digitized materials attached to finding aids**

Finding Aids Experiment

You are researching Rock and Roll in Detroit for a term paper.

1. Does the Bentley Library have any archival collections on this topic?

- **Yes _____   No _____**

2. Name these collections that contain materials on rock and roll?

3. How confident are you that you have located all of the relevant collections?

- **(1 = very uncertain; 10 = very confident)**
  _____

Rock and Roll Tests

- **Archival Knowledge**
  - **Knowledge of information in Finding Aids**
  - **Knowledge of the Finding Aids structure**
  - **Ability to distinguish between context and content**
- **Searching Skills**
  - **Familiarity with simple and Boolean Searching**
  - **Ability to use delimiters**
  - **Knowledge of search strategies such as synonym generation, use of controlled vocabulary**
  - **Exhaustive search for "everything"**
- **Usability**
  - **Ability to use left / right frames**
  - **Ability to identify searching and navigational options at all points**
  - **Supportive of working memory**

Rock & Roll: Searching (1)

Undergraduates

- **Types of search**
  - 5 started with simple search
  - 7 used Boolean search at least once
  - 4 used only simple search
- **Search terms**
  - Detroit, Detroit music, Detroit and Entertainment, Music, Rock, Rock and Roll, Rock and Roll in Detroit, Rock and Roll history

Librarians

- **Types of search**
  - All started with Boolean search
  - 1 used simple search
- **Search terms**
  - Detroit, music, Motown, Rock, Roll, Rock and Roll
  - Subject headings
    - Rock music – Michigan
    - Music – Michigan -- Detroit

BENTLEY HISTORICAL LIBRARY
UNIVERSITY OF MICHIGAN
Finding Aids Project

UMDL F.A. home | U of M login | View bookbag

your bookbag has **0** items

| Home | Search ▼ | Browse | Help |

Basic Search

Other searches: **Boolean search**

Search for: [   ]

within [Entire Finding Aid   ▼]

[Search]

Powered by DLXS
To comment or inquire about content, contact Bentley Historical Library
To report errors, contact University of Michigan Digital Library

Rock & Roll: Searching (2)

Undergraduates

- **Number of searches**

- **Use of delimiters**
  - **All used a default delimiter**

Librarians

- **Number of searches**

- **Use of delimiters**
  - **Varied**

R & R: Views Selected

Undergraduates

- **Use of**
  - "Search Terms in Context"
  - "Standard View"
  - "Full Text"

- **2 never went beyond the abstract to answer the question**

Librarians

- **Use of**
  - "Search Terms in Context"
  - "Standard View"
  - "Full Text"

- **2 never went beyond the abstract to answer the question**

File   Edit   View   Favorites   Tools   Help

Back | Search   Favorites   Media

Address http://www.hti.umich.edu/cgi/f/findaid/findaid-idx?type=simple&c=bhlead&cc=bhlead&sid=14173daa2b37e4e2b3e78b4142f6a8ae&q1=detroit+rock+and+roll&rgn=Ent   Go   Links »

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Finding Aids Project

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your bookbag has **0** items

Home   Search ▾   Browse   Help

Search results

Your basic search for "detroit rock and roll", unsorted in **Bentley Historical Library Finding Aids** resulted in 2 matchin
terms in 1 entire finding aid.

Refine this search

1 of 1 record

Title: John and Leni Sinclair papers
Creator: Sinclair, John, 1941-
Extent: 60.5 linear ft. (76 boxes), 1 oversize folder (UAI), and 1 oversize v.
Abstract: John and Leni Sinclair were leaders of the counterculture movement in Michigan, organizers of radical
social, political, and cultural endeavors primarily in the areas of music, poetry, graphic design, and community
welfare projects. Papers and photographs (1957-1979) relating to all phases of their careers, including
participation in the Artists' Workshop in Detroit, the Rainbow Multi-Media Corporation, the White Panther Party
and its offshoot, the Rainbow Peoples Party; also materials concerning the legalization of marijuana, radical
politics, and prison reform. Also material, 1979-2000, relating to John Sinclair's work as a writer, performer,
radio show host and music promoter.
Search results: 2 matches in entire finding aid

search terms in context | standard view | full text *(443 K bytes)* | add to bookbag

start   MSN Messenger   Yakel_Kim_SAA_2004...   Bentley Historical Libr...   4:12 PM

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Finding Aids Project

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your bookbag has **0** items

Home   Search ▾   Browse   Help

<< Return to search results

John and Leni Sinclair papers 1957-1999

search terms in context | standard view | full text *(443 K bytes)* | add to bookbag

Search within this text

Title Page

Summary Information

Access and Use

Biography

Arrangement

Collection Scope and Content Note

Subject Terms

Contents List

　Textual Records

　　Biographical

　　Correspondence

　　Artists' Workshop Society/Wayne State Univ.
　　Artists' Society

　　Trans-Love Energies Unlimited

　　Rainbow Energies, Inc.

Contents List
　subgrp: Textual Records
　　series: Topical File
　　　otherlevel: 1978-1999
　　　　• ... ou, You Rip Me," 1998 (Exhibition on Detroit Rock and Roll, Rotterdam, the Netherlands) / ...
　　series: Film and Television Projects
　　　　• ... "Motor City Shakedown: A Detroit Rock and Roll Reunion," 1987 ...

start   MSN Messenger   Yakel_Kim_SAA_2004...   Bentley Historical Libr...   4:13 PM

Rock & Roll: Time and Completeness

Undergraduates (10)

- **Time**
  - **Average time on task**
  - **Range**
- **Task completion rate**

Librarians (9)

- **Time**
  - **Average time on task**
  - **Range**
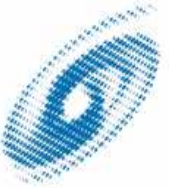- **Task completion rate**

Terrazas Wedding Photograph

You are a descendant of Antonio Terrazas. You have heard that there is a 1909 wedding photograph of him. Can you locate a <u>digital</u> copy of the photograph?

1. What is the URL?

2. In what collection, box and / or folder is the original (analog copy) located?

3. Are there any unfamiliar terms, abbreviations or symbols in this display? Please list there.

Terrazas Photograph Tests

- **Archival knowledge**
  - **Deep web: What happens when people search for someone who is not named as the author or whose name appears in the title**
  - **Ability to find digital documents linked to the finding aid**
  - **Known item search**

Terrazas Photograph Tests

- ## Searching skills
  - ### Use of delimiters
  - ### Understanding of how browser functions can be used in conjunction with EAD sites
    - Use of find function in browser helps search
- ## Usability
  - ### Navigation of the finding aid
  - ### Ability to expand / collapse left frame
  - ### How much scrolling users will do

Terrazas: Searching

Undergraduates

- **Number of searches**
  - Average
  - Range
- **Use of delimiters**
  - 1 used 'This phrase'
  - Collection parameters

Librarians

- **Number of searches**
  - Average number of searches
  - Range
- **Use of delimiters**
  - 6 used 'this phrase'

Terrazas: Search Terms

Undergraduates

- **Names: Antonio Terrazas, Terrazas, Terrazas, Antonio**
- **Date: 1909 wedding, 1909 Marriage Records, 1909 Marriage Certificates, Antonio Terrazas 1909 photograph, Antonio Terrazas wedding 1909, Antonio Terrazas 1909**
- **Others: Antonio Terrazas and wedding, Marriage Records, weddings, wedding photographs**

Librarians

- **Names: antonio terrazas**
- **Date: antonio terrazas 1909**
- **Others: antonio terrazas wedding, antonio terrazas and wedding photograph**
- **Through IE Find function: wedding, terrazas**

File   Edit   View   Favorites   Tools   Help

Back | Search   Favorites   Media | | Address   http://elibrary.unm.edu/oanm/search.html   Go   Links »

Online Archive of New Mexico

SEARCH OANM

Search Hints

[Submit]   [New Search]

Search for: [   ]   Using: [All of these words ▾]

Limited to: [Entire document ▾] In Repository: [All Repositories ▾]

Display Type: [Detailed ▾]

[Submit]   [New Search]

LIBROS Catalog   General Library   Hours

(External websites will open in a new browser window)

Credits

This is a demonstration search form developed by **Alvin Pollock.** demonstrating the power of the free **sgrep** search and indexing program.

start   MSN Messenger   Worksheets   Microsoft Pow...   Usability Test...   Online Archiv...   10:07 PM

New Search

Results of Search
The exact phrase: **"Antonio Terrazas"**

2 Finding Aids Retrieved

Hits   Finding Aids

11   **Amador Family Papers, 1836-1949**

    Repository: Rio Grande Historical Collections

    Collection Size: ca. 52 linear ft.

    Abstract: Papers of the Amador family, entrepreneurs and community leaders of Las Cruces, New Mexico. Martin Amador, with his wife Refugio Ruiz de Amador, operated several businesses in Las Cruces, including the Amador Hotel, a general store, a livery stable, and a business hauling freight and goods from Chihuahua, Mexico, to Santa Fe, New Mexico. The hotel also housed a theater, the local jail, a courtroom, and post office. The Amadors owned several farms in the area. Included in the collection are the ...

1   **Fabián García Papers, 1886-1948 (1899-1948)**

    Repository: Rio Grande Historical Collections

    Collection Size: 2.5 linear feet

    Abstract: Horticulturist, Professor of Horticulture and Director of the Agricultural Experiment Station at New Mexico College of Agriculture and Mechanic Arts (now New Mexico State University) in Las Cruces, New Mexico. Consists of correspondence, notebooks, speeches, manuscripts for publications and other materials related to his career, civic service, and personal life. Includes the extant papers of Alfredo M. Sanchez, an Assistant Superintendent of Public Instruction for the Territory of New Mexico.

New Search	OANM Home	LIBROS Catalog	General Library	UNM Page

Amador Family Papers, 1836-1949

+ Collection Summary
+ Administrative Information
  Biographical Outline
  Scope and Content
− Description of Series/Container List
  + MARTIN AMADOR, 1836-1904
    REFUGIO RUIZ DE AMADOR, 1863-1907
  + CLOTILDE AMADOR DE TERRAZAS, 1886-1948
  + ANTONIO TERRAZAS, 1892-1919
    CORINA AMADOR DE CAMPBELL, 1893-1924
  + EMILIA AMADOR DE GARCIA, 1875-1942
  + JESUS GARCIA, 1867-1931
  + FRANCISCO AMADOR, 1882-1926
    JUAN AMADOR, 1879-1909
    JULIETA AMADOR DE GARCIA, 1888-1949
  + MARIA AMADOR DE DAGUERRE, 1886-1939
    MARTIN A. AMADOR, JR., 1880-1889
    MISCELLANEOUS, 1868-1944
    PHOTOGRAPHS, 1869-ca. 1940, n.d.
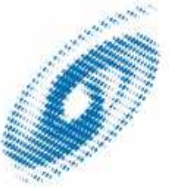
New OANM Search

PHOTOGRAPHS, 1869-ca. 1940, n.d.

(ca. 4 linear ft.)

Images include four generations of the Amador family, Las Cruces area and Mexico, primarily from late 19th and early 20th centuries. Some images are unidentified. The series also contains stereocards and company picture cards collected by Amador family members, in addition to four postcard albums maintained by Clotilde and Julieta Amador. The albums contain a diverse collection of postcards, and additional correspondence between the sisters and their friends.

Box:Folder	Contents
46:1	Martin Amador family, 1869-ca. 1920
	Example: Amador family, Las Cruces, New Mexico, ca. 1900-1902

Box:Folder	Contents
46:2	Emilia Amador Garcia family, ca. 1915-ca. 1917
46:3	Juan E. Amador family, 1896-ca. 1935
46:4	Francisco J. Amador family, n.d.
46:5	Clotilde Amador Terrazas family, ca. 1890-ca. 1916
	Example: Wedding photo of Antonio Terrazas and Clotilde Amador Terrazas, 1909

Box:Folder	Contents
46:6	Julieta Amador Garcia Family, ca. 1903-n.d.
46:7	Corina Amador Campbell family, ca. 1902-n.d.

Terrazas: Time, Completeness & Correctness

Undergraduates (n=11)

- **Time**
  - **Average time to completion**
  - **Range**
- **5 completed the task**

Librarians (n=9)

- **Time**
  - **Average time to completion**
  - **Range**
- **All completed the task**

Findings: Experts and Novices

- **Use of classic search strategies**
  - **Synonym generation**
  - **Use of official subject headings**
- **Use of delimiters**
- **Differences in known item and total recall searches**

Findings

- **Shared representations:**
  - **Archival knowledge**
    - **Ability to distinguish between content and contextual information**
    - **Nature of authorship**
    - **Terminology**

Taking part:

- **Searching**
  - **Low use of delimiters**
- **Navigating**
  - **Browse / Search**
- **Usability**
  - **Attention**
  - **Navigation**

Conclusions

- **Shared representations**
  - **Implicit meanings and archival paradigms exist in digital archives**
- **Taking part**
  - **Researchers have little opportunity to take part in the representations and own them**
- **Next generation tools**