* PUBLIC USER INTERFACE

ROAD TESTING THE PUI*

HOW DIY USABILITY TESTING TAUGHT US ABOUT USERS' MENTAL MODELS FOR ONLINE ARCHIVAL RESEARCH

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WHY IS USABILITY and **ACCESSIBILITY TESTING IMPORTANT?**

Ensure the software platform is easy to learn and convenient to use FOR ALL USERS



Check that the PUI meets users' expectations



Support changes and enhancements to the PUI with real-world use



Identify bugs and flaws invisible to experienced (staff) users and developers



Show how successful users are with research tasks with this new tool



- Collect user reactions and feedback to...
 - Support iterative development
 - Build training tools
 - Squash internal fears of change (we hope!)

DECIDING WHEN TO TEST THE PUI

AS EARLY AS POSSIBLE

Test before changing settings and adding enhancements to the "out-of-the-box" PUI





But...

PUI must be functional

Waited for updates and serious bug fixes from Lyrasis

Users must be available

Test during semester when students and faculty are available and not over-burdened

TEST PERIOD: Feb 1-16, 2018

GOAL: TEST <mark>SITE FUNCTION</mark> WITH <mark>REAL USERS</mark>

"What do our users want? How do they see and use this resource?"



- I. Undergraduate students
- 2. Graduate students
- 3. Faculty
- 4. Outside researchers
- 5. Library staff
- + Users who use screen readers (accessibility testing)

USE PUI TO



- Identify the purpose of the site, which institutions are represented, and what users can do on the site.
- 2. Find collections relevant to a search topic, subject, name, collection identifier, or date range (or combination thereof).
- 3. Find known materials within a larger collection.
- 4. Understand how to access materials and request material for use in the reading room.

METHOD

QUALITATIVE

USER STORIES help us understand a user's <u>mental model*</u>

*A MENTAL MODEL is what the user believes about the system and how they expect it to work

FACILITATED





- Trouble-shoot issues
- Prompt user to "think aloud"
- Observe body language and non-verbal reactions



BENEFITS

Low cost

DIY - Anyone can conduct tests (you do not need to be an expert)

Minimal tools needed

Only 3-5 test participants needed for feedback each round

Repeatable

WHAT WE DID: STEP 1 – PLAN & PREPARE





- Identify the purpose of the site, which institutions are represented, and what users can do on the site.
- 2. Find collections relevant to a search topic, subject, name, collection identifier, or date range (or combination thereof).
- 3. Find known materials within a larger collection.
- 4. Understand how to access materials and request material for use in the reading room.



Postponed until Usability Testing Round 2, but also...

 "Tell me what you think of the site? What is this site for and who would use it?"

2. TASK I: Find materials related to women during the civil war...

- 3. TASK 2: Find a 1943 album from Berkeley College
- 4. TASK 3: Find something useful for your own research!

Asked for each task: How would you view that item in the Reading Room?

WHAT WE DID: STEP 2 – RECRUITING



At least minimal familiarity with archives and special collections, some primary source research experience.



Motivated test participant who understands context of tasks

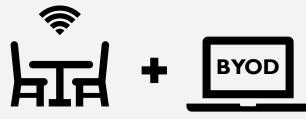




Doodle poll for test sign-up



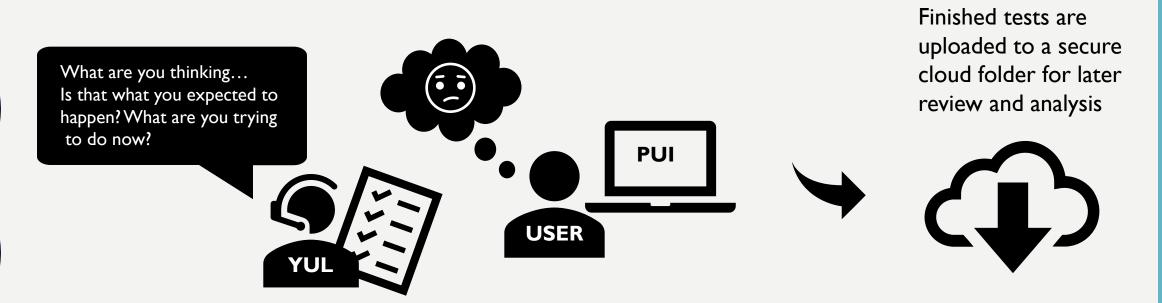
WHAT WE DID: STEP 3 – TESTING!



Met with each participant in a private room equipped with wi-fi. Participants were asked to bring their own device (BYOD)



Screen capture and conversation was recorded to the cloud using **Zoom**. Participants signed a consent form to be recorded.

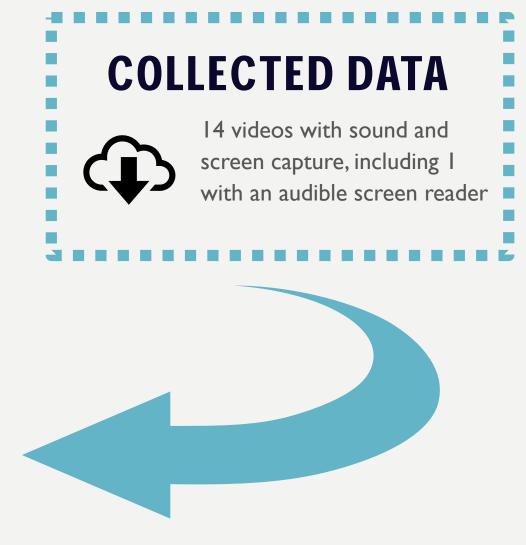


TESTS COMPLETED!

16 total tests completed

- 3 undergraduates
- 5 graduate students (2 discounted due to technical difficulties)
- 2 faculty
- 2 outside researchers
- 3 staff (1 test conducted in old version of Internet Explorer highlighted browser compatibility issue)
- I undergraduate using a screen reader

NEXT STEP: DATA ANALYSIS *then* REPORT AND RECOMMEND



DATA ANALYSIS 💽 🔿 🆽 🔿 📞

Feedback and observations from recordings were coded

Coding process:

Feedback was compiled into a spreadsheet with categories for components and sections of the site.

Sample categories:

- ✓ Home page
- ✓ Visual appearance
- ✓ Top navigation bar
- ✓ Searching
- ✓ Language and use of jargon

Most feedback fell within these general categories

Patterns emerge



- Many users gave similar feedback
- 75% of users used the date filter to refine a search
- Points of confusion and delight were similar across all user groups

FINDINGS

<u>IN A NUTSHELL</u>

More than half of test participants found the site easier to use and more intuitive than the current Yale Finding Aid Database.

Some language and design elements did not match users' mental models.

"Mental model" - what a user believes about the system at hand.

> Based on education, background, expertise, expectations

ASpace jargon	User's mental model
Container Inventory	Box list
Collection organization	Finding aid
File	Folder

Key points of confusion for users



Navigation

Search relevancy and search behavior

"Where is the finding aid?"

- Inherited description from the collection level is repeated at lower levels of description + missing "scope and contents note" label or any indication of inheritance from higher levels
- Location of page elements (also accessibility issues!)
 - Facets in the right sidebar violated users' mental models
 - Search form

RECOMMENDATIONS

a sampling!



Layout changes (e.g., move filters/context tree to the left sidebar)



Clearer language/description



Accessibility changes



Improve search relevancy



Add Yale identity skinning

NEXT STEPS

<u>May</u> - Round 2 testing for Aeon plug-in and other customizations before launch

<u>Future testing</u> - An actionable plan for iterative usability testing should be put in place for future development and upgrades (smaller-scale testing)

Yale

Home Repositories Collections Digital Objects Unprocessed Material Subjects Names Classifications Q		
Search all record types where keyword(s): hughes	New Search Refine Search	
Showing Results: 1 - 92 of 92		
Relevance • Sort	Filtered By	
Langston Hughes collection	Type: Collection X	
Summary: The Langston Hughes Collection consists of correspondence, writings, photographs, sound recordings, video recordings, electronic files, and other material documenting the life, work, and remembrance of Langston Hughes Series I, Josephine DeWitt Rhodehamel Gift, is organized into three subseries. Letters from Langston Hughes, Writings of Langston	Filter Results	
Hughes and Writings of Others. There are letters to Rhodehamel and holograph and typescript versions of poems for Dear Lovely Death. Series	Search within results	
Found In: Beinecke Rare Book and Manuscript Library > Langston Hughes collection	From ++ To Search	
Henry Stuart Hughes papers	Additional filters:	
Collection Call Number: MS 1446	Repository Manuscripts and Archives 41	
Summary: The papers consist of correspondence, writings, campaign records, personal papers, and photographs documenting the life and career of Henry Stuad Hughes. The collection documents Hughes' military career dring and after World War II, his 1962 senatorial campaign, his tenure as co-chair and chair of the National Committee for a Sane Nuclear Policy (SANE), his addemic career and writings, and his personal life.	Beinecke Rare Book and Manuscript Library 38 Yale University Music Library 7 Yale Center for British Art 3	
Found in: Manuscripts and Archives > Henry Stuart Hughes papers	Yale University Divinity School Library 2	
	v more Subject	
Langston Hughes papers Collection Call Number JWJ MSS 28	Authors. 15	
Collection Gall Number: JWJ MSS 28	Authors, American - 20th century - Archives 12	

WITH CUSTOMIZATIONS

- Facets moved to left side
- Contrast problems resolved for accessibility
- Dates added to search results

Yale		A
A Repositories - Repositories Collections	Subjects Names Help Q	
Search collections where keyword(s): hughes		New Search Refine Search
Showing Results: 1 - 20 of 92		
Filter Results	1 2 3 4 5	Relevance V Sort
Search within results From year To year Search Additional filters: Repository Manuscripts and Archives 41 Beinecke Rare Book and Manuscript Library 38	Langston Hughes collection ■ Collection Call Number: JWJ MSS 28 Summary: The Langston Hughes Collection consists of correspondence, writings, photographs, sound recordings, video recordings, electronic files, and other mati work, and remembrance of Langston Hughes. Series I, Josephine DeWitt Rhodehamel Gift, is organized into three subseries: Letters from Langston Hughes, Writing Writings of Others. There is eletters to Rhodehamel and holograph and typescript versions of poems for Dear Lovely Death.Series Dates: 1924-1969 Found In: Beinecke Rar, book and Manuscript Library > Langston Hughes collection	
beinesser and explore and viewards of the closery 7 Yale University Music Library 7 Yale Center for British Art, Rare Books and Manuscripts 3 Yale University Univity School Library 2 vmore Subject Authors. 15 Authors. American - 20th century - Archives. 12 Lawyers. 11 African American authors - 20th century - Archives. 10 American literature - 20th century - 9	Henry Stuart Hughes papers Collection Call Number: MS 1446 Summary: The papers consist of correspondence, writings, campaign records, personal papers, and photographs documenting the life and career of Henry Stuart I documents Hughes military career during and after World War II, his 1962 senatorial campaign, his tenure as co-chair and chair of the National Committee for a Sc his academic career and writings, and his personal life. Dates: 1916-2000 Found in: Manuscripts and Archives > Henry Stuart Hughes papers	
v more	Langston Hughes papers Collection Call Number: JWJ MSS 26	

OUT-OF-THE-BOX PUI

what users saw during testing

Yale

Langston Hughes papers

Collection Call Number: JWJ MSS 26

Beinecke Rare Book and Manuscript Library > Langston Hughes papers

Collection Overview Collection Organization Container Inventory

The career of James Langston Hughes spanned five decades. He wrote poetry, short stories, plays, newspaper columns, children's books, and pictorial histories. He also edited several volumes of prose and fiction by Afro-American and African writers. Through his writing and through his extensive travels and lecture tours he came into direct contact with an amazing array of writers, artists, activists, and performers. The papers span the ... See more >

Dates

1862-1980

Information about Access

This collection is open for research.

Boxes 639-667 and items in cold storage: Restricted fragile material. Reference surrogates have been substituted in the main files. For further information consult the appropriate curator.

..... . . .

Yale

WITH CUSTOMIZATIONS	Repositories - Repositories Collections Subjects Names Help Q Beinecke Rare Book and Manuscript Library Langston Hughes papers >	
New breadcrumb styling New labels! • "Finding Aid View" • "Navigate the collection" • "Description of papers"	Langston Hughes papers Collection Call Number: JWJ MSS 26 Collection Overview Finding Aid View Container List	Citation Ask a Question
	The career of James Langston Hugnes, beanned five decades. He wrote poetry, short stories, plays, newspaper columns, children's books, and pictorial histories. He also edited several volumes of prose and fiction by Afro-American and African writers. Through his writing and through his extensive travels and lecture tours he came into direct contact with an amazing array of writers, artists, activists, and performers. The papers span the <u>See more</u> > Dates 1862-1980	Search Collection From year To year Search
	Language English	Navigate the collection Langston Hughes papers
	Information about Access The materials are open for research.	Box 421, folder 9320 Personal Correspondence, ca. 1910-1967

Search Collection

Collection organization

Langston Hughes papers

> Box 421, folder 9320

Years: From

To To

> Personal Correspondence, ca. 1910-1967

Citation

Print

Search

OUT-OF-THE-BOX PUI what users saw during testing

THANK YOU!

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