ASKING THE USER

INCORPORATING USER-CENTERED CUSTOMIZATIONS and FEATURES into
YALE'S ARCHIVESSPACE PUI



Archives Space Member Forum 2018, Washington, D.C.

August 14, 2018

WE ARE...

Yale Archives Space
Public User
Interface (PUI)
Implementation
Team Members



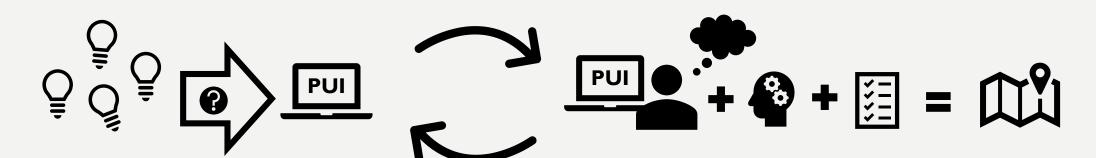
Stephanie Bredbenner

Eve Neiger

Alison Clemens

YALE ARCHIVESSPACE PUI IMPLEMENTATION TEAM

Data Cleanup/
Enhancement Branding & Technical Documentation
Workgroup Promotion
Workgroup Workgroup



Usability & Accessibility Workgroup

Settings & Enhancements Workgroup



Project Manager:

Melissa Wisner

Ex officio:

Mark Custer



Settings & Enhancements Workgroup

- Stephanie Bredbenner
- Anna Franz
- Jon Manton
- Steve Wieda
- Alison Clemens Team Lead



Usability & Accessibility Workgroup

- Moira Fitzgerald
- Tracy MacMath
- Jenn Nolte
- Eve Neiger Team Lead

OUR INSTITUTIONAL CONTEXT

Yale & ArchivesSpace

- Implemented ASpace in 2014
- Managed by the Yale Archival Management Systems Committee (YAMS)
- We document our work in:
 - → ArchivesSpace at Yale: User Manual
 - → YAMS LibGuide
 - → ArchivesSpace @ Yale blog

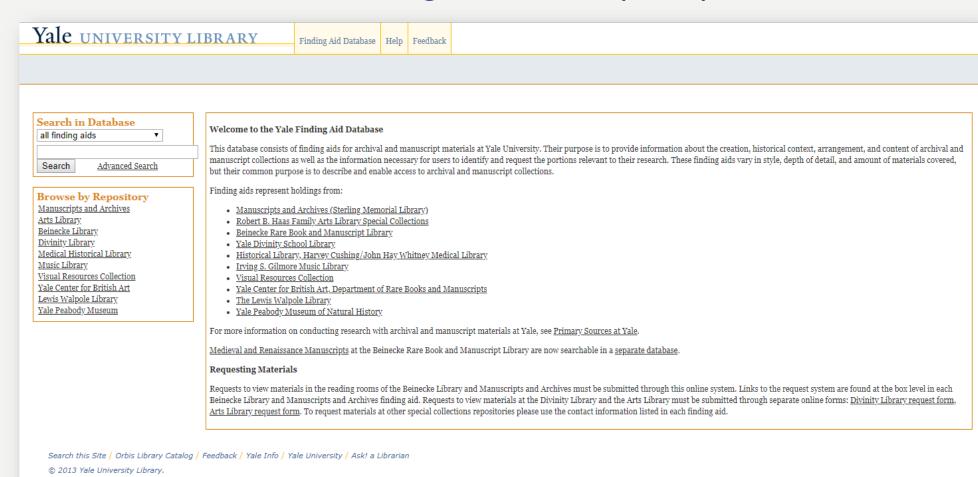
OUR INSTITUTIONAL CONTEXT

Yale's archival data lives in...

- ArchivesSpace (produce & maintain)
- MARC (distribute)
- EAD as XML (distribute)
- EAD as HTML (distribute)
- EAD as PDF (distribute)

YALE AND ARCHIVAL DISCOVERY

Yale Finding Aid Database (YFAD)



OUR GOALS FOR THE PUI

We wanted to...

- Increase UX with discovery & access to archival material
- Launch a holistic service integrated with production systems
- Bring a new level of service to finding aids & ASpace
- Leverage local expertise
- Improve integration with the library's federated search tool
- Create potential for more connections with other institutions and data on the wider web
- Provide new pathways and contextual connections for discovery (e.g. discovery via creators)

WE ACCOMPLISHED THIS BY...

Using a project charter and dedicating a project manager

Directly involving 30+ Yale Library staff members throughout the project

Allocating resources: staff time and external development

PRIORITIES AND QUESTIONS AHEAD OF TESTING

LEVERAGED STAFF EXPERTISE

- PUI Settings & Enhancements
 Workgroup reviewed the PUI
- Solicited model search cases from YUL staff

HEARD FROM USERS

- Gathered feedback via user interviews with select populations
 - Undergraduate students
 - Graduate students
 - Yale faculty
 - Outside researchers
 - Yale University Library staff
- Based on user interviews, created list of desired outcomes
- Tested those expected and desired outcomes

WE BEGAN BY...

EDUCATING OURSELVES

Familiarize ourselves with the default & figure out what can be changed:

- By us in application settings
- By us with development
- By our vendor (Lyrasis)

COLLABORATING WITH COLLEAGUES

- Gather feedback and reactions & serve as stakeholder ambassadors
- Examine PUI-based and non-PUI based search and discovery interfaces for features of interest



Develop a needs list...a wish list...and a future, blue sky list

HOW WE APPROACHED MAKING CHANGES

OUR APPROACH WAS TO...

- Conduct user testing and analysis
- Review and interpret results from testing
- Make decisions about next steps

WE'LL EXPLAIN IT BY...

Tracing select issues



- Inherited description for scope and content notes
- Jargon and language
- Sharing descriptive data
- Contextual search results

WHY IS USABILITY IMPORTANT?

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

SAVE







But...

PUI must be functional

Users must be available

Ist TEST PERIOD: Feb 1-16, 2018

2nd TEST PERIOD: Jun 12-28, 2018

U&A WORKGROUP GOAL: TEST SITE FUNCTION WITH REAL USERS

"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)





- I. 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 FACILITATED TESTING

TEST the not WEBSITE THE USER



• 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



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



KEY RESOURCE:

Krug, Steve. Rocket Surgery Made Easy: The Do-it-yourself Guide to Finding and Fixing Usability Problems. Berkeley, CA: New Riders, 2010.

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

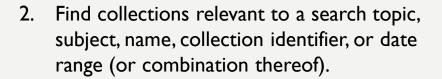
Repeatable

WHAT WE DID: STEP 1 - PLAN & PREPARE (ROUND 1)





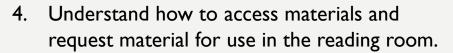
I. Identify the purpose of the site, which institutions are represented, and what users can do on the site.





- I. "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. Find known materials within a larger collection. -





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



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

I. 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





List of recent researchers in each category





Snowball sampling - Test participants connect us with other users







Doodle poll for test sign-up





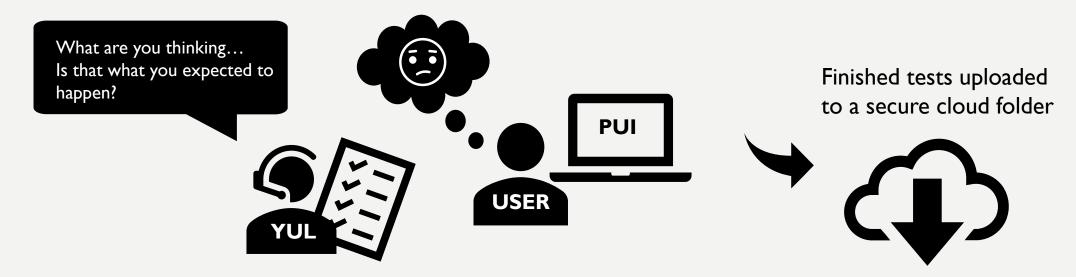
WHAT WE DID: STEP 3 - TESTING!



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.



ROUND 1 TESTS COMPLETED!

16 total tests completed

- 3 undergraduates
- 5 graduate students (2 discounted due to technical difficulties)
- 2 faculty
- 2 outside researchers
- 3 staff
- I undergraduate using a screen reader

NEXT STEP: DATA ANALYSIS then REPORT AND RECOMMEND

COLLECTED DATA



14 videos with sound and screen capture, including one with an audible screen reader

DATA ANALYSIS











Feedback and observations from recordings were coded

													
fx													- 1
	А	В	С	D	E	F	G	Н	I	J	К	L	
1	Test video Unique ID	User group	Test date and time	Facilitator	1st Review	2nd Review	3rd Review	Technical notes/issues	Home page	Navigation	Searching	Language and jargon	Visual ap _l
2	A	Undergraduate	2/1/2018 11:00	MF	EN				Self explanatory. Simple and minimalist.		Date range search doesn't work as expected.	"Where is the finding aid?"	Minimalist
3													
4													
5													
6													
7													
8													
9													

Patterns emerge



- Many users gave similar feedback
- Points of confusion and delight were similar across all user groups

FINDINGS: WHAT WE SAW...

IN A NUTSHELL

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.

Key points of confusion for users



Navigation



Search relevancy and search behavior



"Where is the finding aid?"



Inherited description from higher levels is repeated at lower levels of description + missing label or indication of inheritance



Location of page elements (also accessibility issues!)

- Facets in the right sidebar violated users' mental models
- Search form

Yale

Collections Digital Objects Unprocessed Material Subjects Classifications Q "This doesn't help me that much." Correspondence regarding Association of Learned Societies research fellowship, 1930-1934 File - Container: 49, Folder: 1020 Call Number: GEN MSS 1429. Series II Beinecke Rare Book and Manuscript Library > Frederick W. Hilles Manuscript Collection and Papers > Frederick W. Hilles Papers, 1775-1979 > Profession > Correspondence regarding Association of Learned Societies research fellowship, 1930-1934 Professional and personal papers of Frederick W. Hilles and his family, including personal and professional correspondence; research files; writings; personal and family papers, including Collection organization material related to Susan Morse Hilles and Charles Dewey Hilles; teaching materials from Hilles' tenure at Yale University and Temple University; and material documenting Hilles' service on the boards of the Yale Library Associates and the Yale University...See more > "X" general, 1971 Dates "Y" general, 1952-1975 "Wait, is this the same item?" 1930-1934 Yale University Press, 1937-1975 Language of Materials "Z" general, 1956-1975. Unidentified, 1926-1974 Chiefly in English; some manuscripts in French, Italian, Spanish, and Latin. Empty envelopes Information about Access Correspondence regarding Association of This collection is open for research. Correspondence regarding Chauncey Bre. Extent Correspondence regarding Frederick W. Hi. From the Series: 52.53 linear feet ((107 boxes) + 1 broadside, 1 roll.) Correspondence regarding Laurence E. Po.. Expand All Correspondence regarding PhD thesis of B. Physical Storage Information Correspondence regarding Reynolds exhib. Christmas cards, 1951-1974 Repository Details "I'm thrown because I clicked on a Christmas cards, 1951-1974 Unfiled specific item and this description is from

"That was confusing – I thought I had gone to the wrong page; to the [collection] home page."

the beginning of the collection."

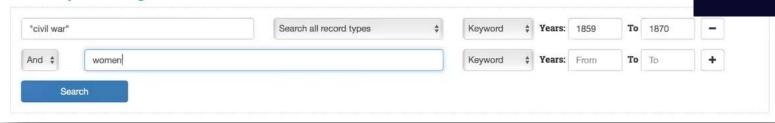
> Research Files 1900-1975

Term	Locations in PUI	Defined by users as	Usability issue caused	
Collection Organization	Collection level resource record	<mark>≠ Finding Aid</mark>	Can't find the "Finding Aid"	
Container	Search results, Collection level resource record	Eventually realize it means "box" but this is not intuitive	Confusion/discomfort	
Container Collection level resource record		? (for most)	Can't find "Box list"	
Creator	Drop down "search by" menu in search bar	? (for some)	Avoidance	
Digital Materials	Drop-down "limit to" menu in search bar	Unclear (digitized vs. born digital), Unique from collections	Confusion and avoidance	
Digital Objects	Top navigation menu	Unclear (digitized vs. born digital), Different from Digital Materials?	Confusion and avoidance	
File Search results, File level resource record pages		Computer file, folder, item (inconsistent)	Confusion about relationship between description and physical items	
Notes	Drop down "search by" menu in search bar	? (for all)	Avoidance	
Person Search results		"What qualifies a name as a 'person'?"	Confusion about where these linked records will lead	
Repositories Top navigation menu, tex		Unclear without further exploration (visible list of repositories)	Confusion and avoidance	

JARGON & LANGUAGE

How can the words we use cause confusion and usability issues?

OUT-OF-THE-BOX PUI: Search results What users saw during testing



Safari File Edit View History Bookmarks Window Help

"I've seen other databases where they give you a snippet of a sentence with your search term highlighted... I'd like to see that."

Find what you're looking for:

"Having search terms highlighted would be helpful."

States Army during the American Civil War

Found in: Beinecke Rare Book and Manuscript Library > Julia Driver collection of women in photography. > Card Photographs and Other Photographic Materials > Photographic Materials

Brewster family papers

Collection Call Number: WA MSS S-1309

Summary: The papers contain diaries, artwork, and an album of Elizabeth Bates Brewster and her daughters Ada Augusta Brewster, Mary Brewster Long, and Elizabeth Brewster Scribner. Subjects discussed include child rearing and family life, nursing during the Civil War, school teaching, and life in Nevada and California.

Found in: Beinecke Rare Book and Manuscript Library > Brewster family papers

Collection Call Number: WA MSS S-1354

Summary: The papers contain correspondence, appointments, discharge certificates, photographs, printed material, and other military papers documenting Tobey's life and career, particularly during the Civil War years. There is additional material concerning his later career during which time served at several Far Western posts.

Found in: Beinecke Rare Book and Manuscript Library > Thomas Fry Tobey papers

Webster family papers

Thomas Fry Tobey papers

Collection Call Number: MS-527

Summary: Principal figures in these papers are Noah Webster, the lexicographer, and his son William Greenleaf Webster. Also included are papers pertaining to the G. C. Merriam Company and the publication of Noah Webster's dictionaries and grammars. Family correspondence includes twenty-two letters written by Noah Webster to his son between 1835 and 1843 while the latter was in Cincinnati, Ohio, and La Fayette, Indiana, selling his father's books. The papers of William Greenleaf Webster make up...

"Most of these are women...but here is a Thomas, I don't know why this is here."

0 1 0

USABILITY TESTS – TAKE TWO!

Same general functions









Same tasks **NEW** tasks

- **Updated interface!**
- Identify the purpose of the site, which institutions are represented, and what users can do on the site.
- Find collections relevant to a search topic, subject, name, collection identifier, or date range (or combination thereof).
- Understand how to access materials and request material for use in the reading room.
- Understand that multiple folders from the same box do not need to be requested separately.



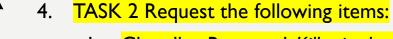
"Tell me what you think of the site? What is this site for and who would use it?"

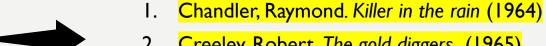


TASK 1: Find materials related to women during the civil war...



TASK 3 Find and request Rosamund Johnson's composition"Fishing"





- Creeley, Robert. The gold diggers (1965)

ROUND 2 TESTS COMPLETED!

6 total tests completed

- 2 non-Yale undergraduates
- I Yale graduate students
- 3 staff (1 test conducted while Aeon requesting was down)



DATA ANALYSIS

• Added categories for requesting



- How are the new customizations and changed received?
- Did changes help usability issues?

COLLECTED DATA



6 videos with sound and screen capture



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



REPORT OUT!

- I. METHOD & PROCESS
- II. FINDINGS
 - I. USER FEEDBACK BY CATEGORY
- III. RECOMMENDATIONS

 BASED ON USER

 FEEDBACK
- IV. RECOMMEND FUTURE
 TESTING

SO WE'VE DONE USABILITY TESTING... NOW WHAT?

ANALYZING RESULTS & PRIORITIZING ISSUES

ANALYZING RESULTS



Read U&A recommendations



Compared our notes and merged similar issues



Watched the usability test videos



Ran our own tests to uncover additional issues

PRIORITIZATION CONSIDERATIONS

- U&A critical designation
- User confusion
- User delight/enhancement of experience
- Staff workflows/use by professionals

- Continuity of service/level of disruption if not addressed until post-launch
- Timeline/difficulty of potential fixes

BRAINSTORMING SOLUTIONS

Multiple possible outcomes...

We already had a solution in mind, and user testing confirmed.



User testing uncovered additional issues that changed our initial recommendations.

We considered multiple solutions, and user testing helped us choose one.



Multiple possible solutions that user testing did not resolve; noted issue and possible solutions in future recommendations report.

MAKING THE CHANGES

Project leaders reviewed priority issues and decided where to route our requests:

Yale-specific





Basecamp



JIRA ticket



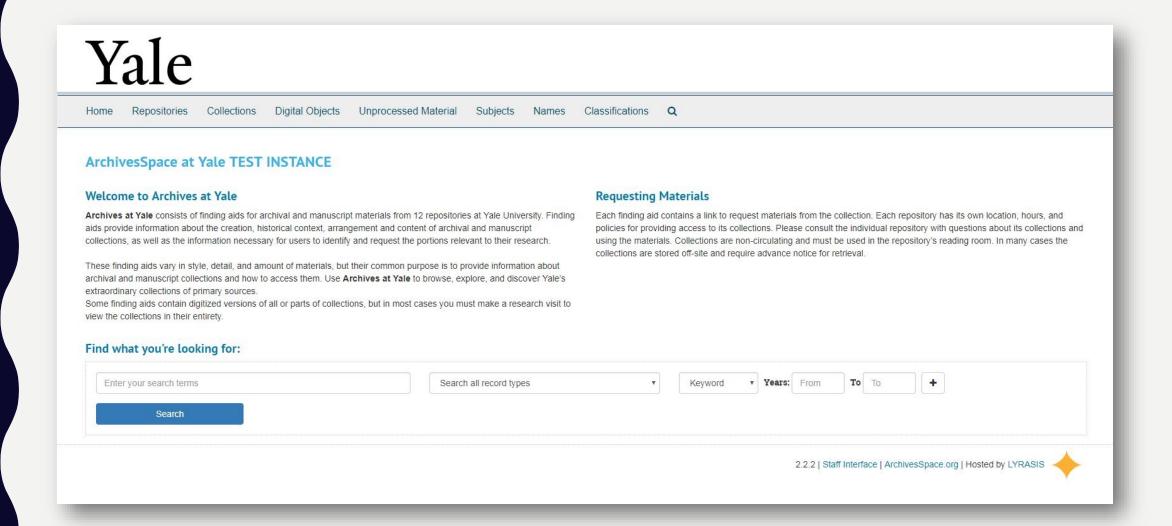
HOW DID USABILITY TESTING AFFECT OUR DECISIONS?

ISSUE	RESULT
 Inherited scope and contents notes Testing confirmed user confusion We also considered indexing issues 	 Suppress for now In future recommendations, consider displaying them, but labeling clearly If they are displayed again, they should not be indexed
 Jargon and language issues Testing confirmed user confusion Some user confusion we did not anticipate (limit to collections, subjects, names) 	 Change container inventory to container list, navigate collection to finding aid view Add explanations of limit to collections, names, and subjects to help page

HOW DID USABILITY TESTING AFFECT OUR DECISIONS?

ISSUE	RESULT
 Contextual search results We brainstormed several solutions before testing Testing confirmed potential for user enhancement, but did not clarify the best possible solution 	 Could not decide on best solution Lowered prioritization and added to future recommendations report
 Downloading structured data (CSV) When we first discussed before testing, would have required development work 	 Testing script wasn't designed to target this Added to future recommendations report Harvard's development may affect future prioritization

FRONT PAGE - BEFORE



FRONT PAGE - AFTER

Moved search bar to top of home page

Simplified intro text

Archives at Yale

Repositories Collections Subjects Names Help Q

Welcome to Archives at Yale

Find what you're looking for

Enter your search terms

Search all record types From To To +

Search

About this Site

Yale

Archives at Yale contains finding aids from 10 libraries and repositories at Yale University. Finding aids describe the creation, content, context, and arrangement of archival materials, allowing users to identify and request materials relevant to their research. Use Archives at Yale to browse, explore, and discover Yale's extraordinary collections of primary sources.

Privacy Policy

Requesting Materials

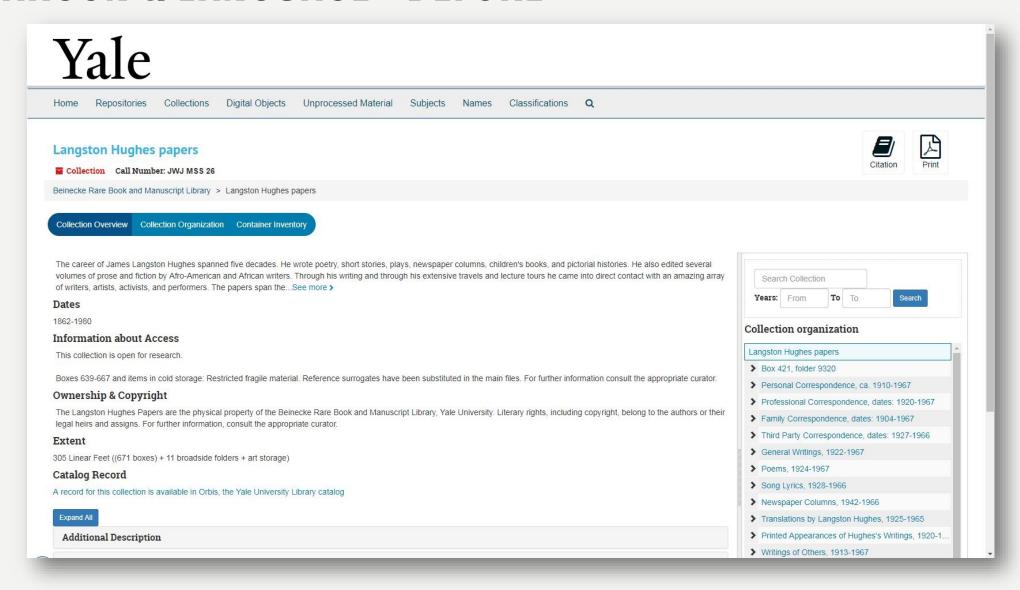
Each finding aid contains a link to request materials from the collections. **Each repository has its own location, hours, and policies for providing access to its collections.** Please consult the repository with questions about using the materials. Collections are non-circulating and must be used in the repository's reading room. In many cases the collections are stored off-site and require advance notice for retrieval. Some finding aids contain digitized versions of all or parts of a collection, but in most cases viewing a collection in its entirety will require visiting the repository.

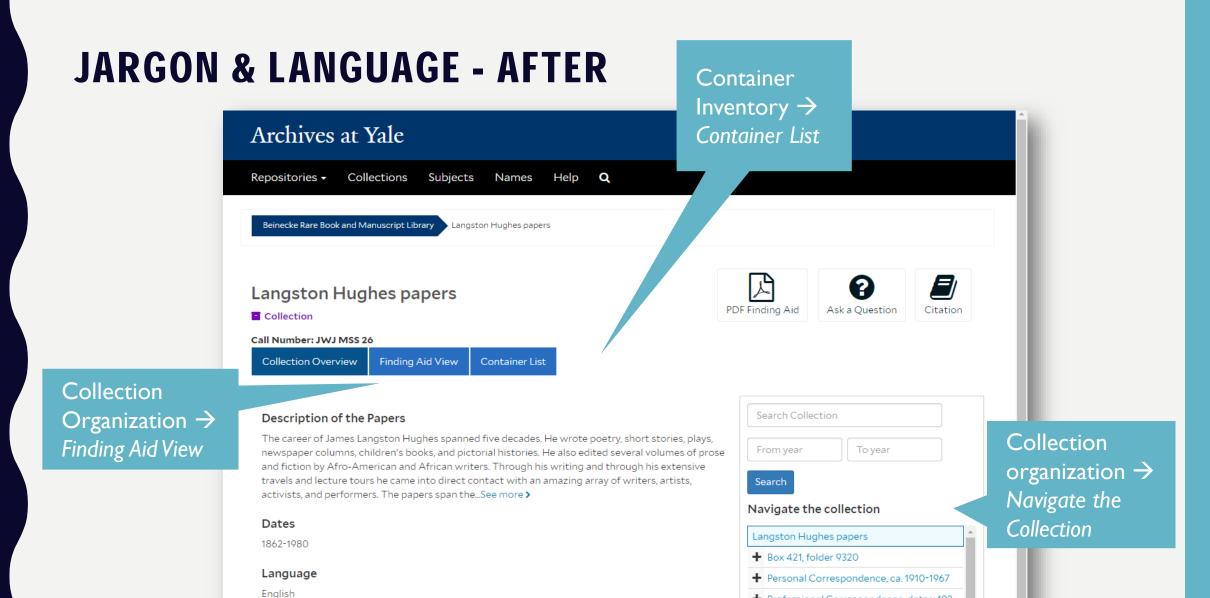
Added more info about requesting

Links promote accessibility, visual interest, and engagement

- Simplified top bar

JARGON & LANGUAGE - BEFORE





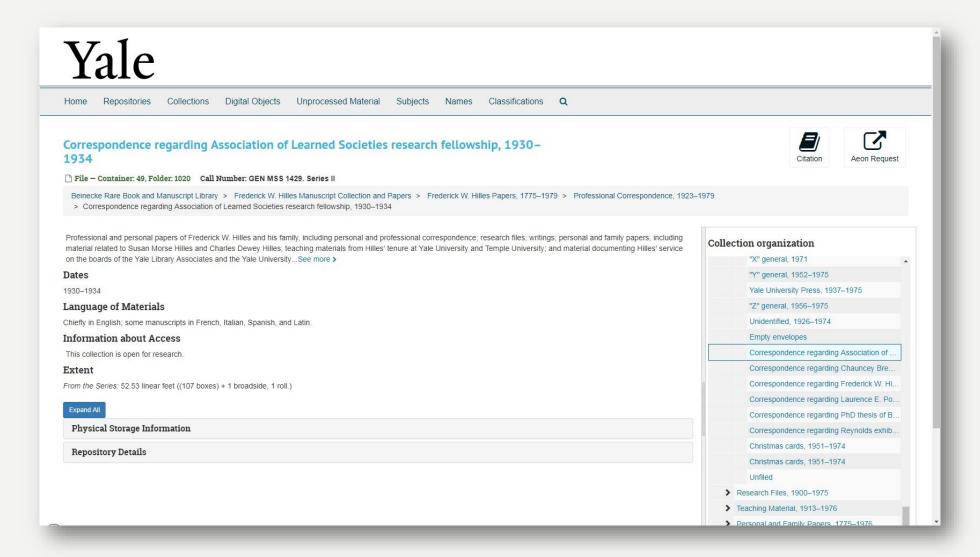
Information about Access

The materials are onen for research

Professional Correspondence, dates: 192...
 Family Correspondence, dates: 1904-1967

+ Third Party Correspondence, dates: 1927-.

INHERITED NOTES - BEFORE

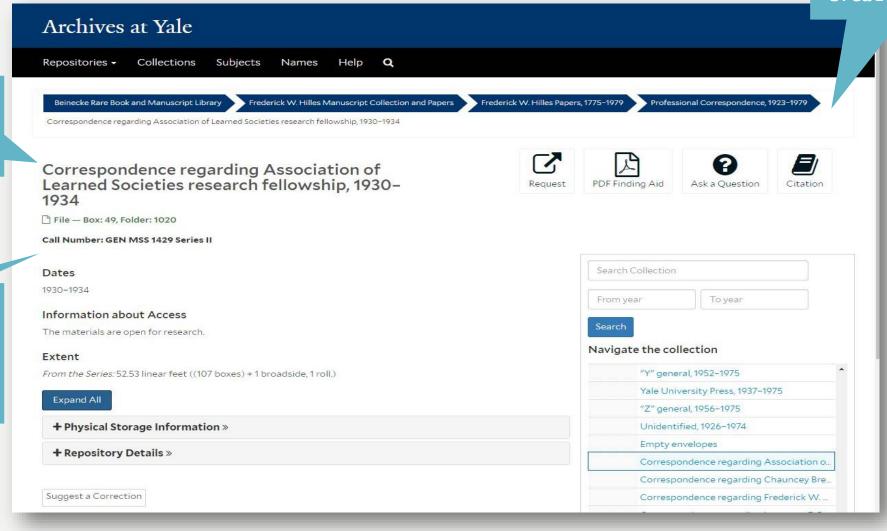


INHERITED NOTES - AFTER

More pronounced breadcrumbs

Increased the prominence of the title

Suppressed inherited language and S&C notes



CHALLENGES



Constant active development



Partial solutions not in line with our original vision or recommendations



Maintaining project documentation on multiple platforms over an extended period of time

INTERNAL DOCUMENTATION/COMMUNICATION

EXTERNAL DOCUMENTATION/COMMUNICATION











NEXT STEPS and COMMUNITY ENGAGEMENT



S&E Workgroup has prioritized remaining recommendations into four tiers and compiled a report about future enhancements



Future iterative user testing will be managed by Yale Archival Management Systems Committee



Shared U&A report to Aspace listserv



Hosted our code on Github



Submitted IIRA tickets for core code contributions



- → Join the ArchivesSpace Users
 Group listserv
- → Reach out to other partner institutions, ask questions, and share resources
- → Check out existing Github code and JIRA tickets
- → Start conversations on the listserv and comment on existing JIRA tickets
- → Submit your own JIRA tickets

RESOURCES

Current test version of Archives at Yale: https://puitestarchivesspace.library.yale.edu

Resources from our PUI implementation process: http://bit.ly/YalePUI

Yale's ArchivesSpace Github page: github.com/YaleArchivesSpace

Submit and comment on JIRA tickets here: development.archivesspace.org

Steve Krug's website and resources for DIY usability testing:

www.sensible.com

www.sensible.com/downloads-rsme.html

THANK YOU!

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