

Sharing with All : Accessibility and Historical Resources

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Today

- Intro and context
- What does 'accessibility' mean?
- Tools to know about
- Seeking best practices
- Three examples
- Questions!

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Notes

<http://modernhypatia.info/digitalcommonwealth2018>

Hayes Research Library

One of the largest non-medical collections about blindness, deafblindness, and blindness education in the world.

- Samuel Gridley Howe
- Laura Bridgman
- Anne Sullivan
- Helen Keller
- Many more!

Recent Projects

Halifax Explosion
(online project)

<http://www.perkins.org/history/halifax>

Perkins Timeline
(physical and online)

<http://www.perkins.org/timeline>

What does accessibility mean?

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Why accessibility?

- It's the right thing to do.
- Legal requirement for many institutions.
- Includes people in their own history and community.

And...

- Can provide new perspective or context.
- More efficient access for many people.
- Demonstrates accessible options for other spaces.

Many reasons for accessible tools

- Some are long-term.
(Things someone deals with all the time.)
- Some are short-term.
(Injury, illness, parenting small children.)
- Some are only in specific settings
(Noisy rooms, travel, using data not wi-fi, etc.)

[An Alphabet of Accessibility Issues](#) by Anne Gibson

Example issues

- Screen readers can't make sense of a page/site
- Contrast is poor, or color is used as a sole indicator
- Audio/video with no transcript or captioning.
- Mobility and dexterity limit access to content
- Cognitive overload (busy pages, moving items)
- Migraines (design choices, movement, etc.)
- Image-only options (like PDFs or infographics).
- Limited technology / bandwidth options.

Medical vs. social model

Medical model of disability

- People are disabled by impairments, differences, or lack of function in a specific (often measurable) way.

Social model of disability

- Disability is caused by the way society is set up - if we removed those barriers, the disability wouldn't exist.

Spoon theory

- [Metaphor from Christine Miserandino](#) explaining living with chronic health conditions.
- People may refer to themselves as a “spoonie”.
- Tasks take more energy, and you start with less.
- Some people prefer a ‘smart phone battery’ metaphor. (Some tasks burn battery very fast, some people never start with a full battery.)

Universal Design : theory

- Equitable use
- Flexibility in use
- Simple and intuitive use
- Perceptible information
- Tolerance for error
- Low physical effort
- Size and space for approach and use

Universal Design : examples

- Curb cuts: wheelchairs, but also strollers and luggage.
- Audiobooks
- Video with transcript, captioning, and audio description.
- Velcro
- Many things on infomercials.
- [London, UK black cabs are all fully accessible.](#)

Provide information

Allows people to plan, ask questions, get help.

Offer choices

People know their own needs and preferences best.

Many different needs

Some accessibility needs are mutually exclusive.

Examples: conflicting needs

- Background color: light vs. dark
- Preferred font choices and sizes
- Service dog vs. allergies
- Scent allergies vs. use for pain or focus management.
- Online access vs. someone who only has mobile device.

Self-identification

Many people with accessibility needs may not self-identify.

Language: person-first vs. community

Person-first:

- A doctor who uses a wheelchair.
- A student who is visually impaired.

Community:

- A Deaf man.
- An autistic woman.

Improve experience

Captioning is awesome.

Tools to know

2
2
1

Most common tool?

Changing the size

How does your website respond?

Link design

Use meaningful text for links. “Read a transcription of X.”

Captioning

Provides the audio content - including background sounds.

Transcriptions

Text version of audio or video material.

Alt-text

Share key information about images with screen reader users.

Images

- Alt-text (1-2 sentence)
- Caption or description
- Transcription of all text images.

Audio description

Share visual information in videos, galleries, etc.

Audio description

- Ideal to write video scripts that include descriptive details.
- Descriptive transcripts offer searchability + more space.
- Consider the primary focus (Information? Art? Storytelling?)
- Work outside in.
- Let your knowledge and informed opinions show.

Multiple indicators

Not just color or position.

Headers and styles

Help readers navigate longer text pieces.

Size of clickable space

Bigger is better (within reason)

Visual clutter

Help people focus on your content

Technical formatting

Forms, design, and other complexities.

Formatting - specifics

- Keyboard accessible? (Navigate using just tab and enter/return)
- Screen reader accessible? (Navigate using JAWS, VoiceOver, NVDA, etc?)
- Color contrast? Is there enough contrast?
- Do headings follow a logical order?
- Does alt-text describe what is in the image?
- Can a screen reader read what is on the labels of a form?

Best practices

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Listen

People will have different needs and preferred tools or solutions.

Known people

Ask what works best for them. Some ideas:

- Do they have a preference for note/material formats?
- Would it help them to get slides or handouts in advance?
- Is there seating or lighting that would help?
- Do they need help finding or navigating the space?
- Do they need an interpreter?

Context

- Don't assume a shared background.
- Give details to orient space / time / focus.
- Explain interesting points.
- What is obvious to you probably isn't to most visitors.

Metadata and search

- Historical terminology may not be the current language.
- Especially true for disability, social history.
- Consider how you want to label items.

Tacit knowledge

- Navigation and purpose can be confusing.
- Consider an intro page that includes explanations.
- Point out accessibility options as relevant.

Multiple access points

- Design for multiple access options.
- Text is flexible and searchable.
- Audio : provide transcripts
- Video: provide captioning plus transcripts if possible.
- Respect bandwidth and data requirements.
- Easy to start/stop/come back.

Programs

- Consider audio described tours or options.
- Consider CART vs. ASL (or appropriate sign language).
- Tactile tours, or ability to handle objects or samples.

PDFs and handouts

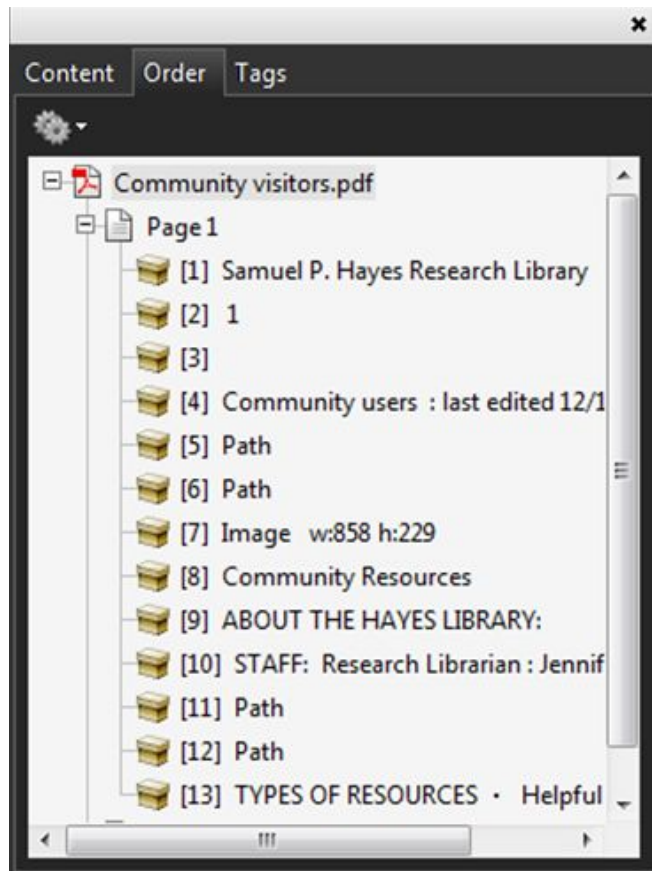
- Hard to create accessible PDFs without some planning.
- Will need additional attention.
- Creating a text + headings version also works.

PDF structure: unedited

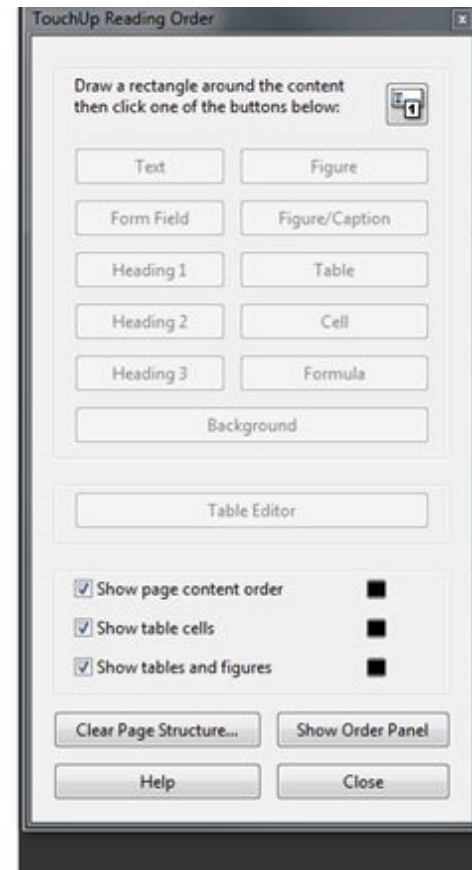
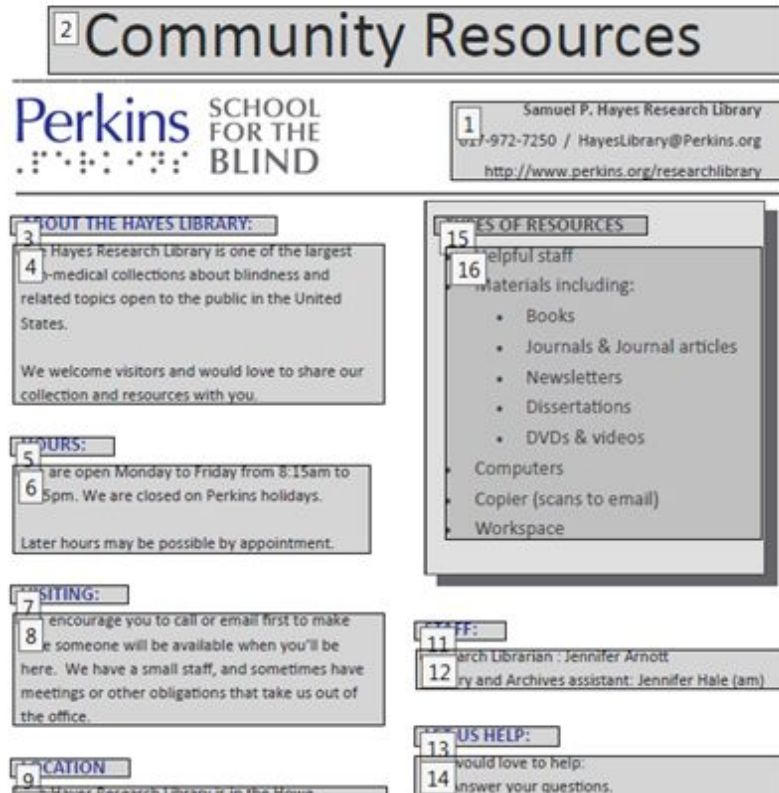
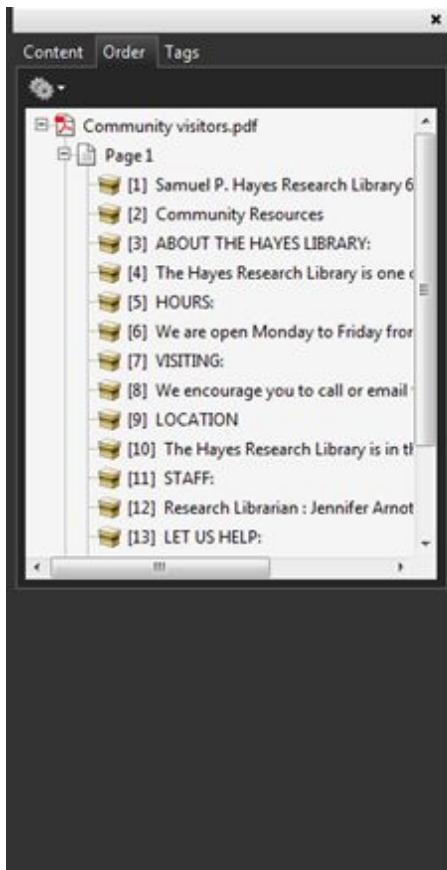
The image displays a PDF viewer interface with three main components:

- Left Panel (Content/Order/Tags):** A tree view showing the document's structure. The root is 'Community visitors.pdf', followed by 'Page 1'. The list includes: [1] Samuel P. Hayes Research Library, [2] 1, [3], [4] Community users : last edited 12/1, [5] Path, [6] Path, [7] Image w:858 h:229, [8] Community Resources, [9] ABOUT THE HAYES LIBRARY:, [10] STAFF: Research Librarian : Jennif, [11] Path, [12] Path, and [13] TYPES OF RESOURCES · Helpfu.
- Central Document View:** The page content is annotated with numbered boxes (1-10) and labels. Box 8 is the main heading 'Community Resources'. Box 7 is a logo for 'PERKINS SCHOOL FOR THE BLIND'. Box 1 is contact information for Samuel P. Hayes Research Library. Box 9 is the 'ABOUT THE HAYES LIBRARY:' section. Box 10 is the 'STAFF:' section. A large 'Figure -' label with a diagonal cross is placed over a list of resources.
- Right Panel (TouchUp Reading Order):** A control panel for adjusting the reading order. It includes a 'Draw a rectangle around the content then click one of the buttons below:' instruction. Buttons include: Text, Figure, Form Field, Figure/Caption, Heading 1, Table, Heading 2, Cell, Heading 3, Formula, Background, Table Editor, Show page content order (checked), Show table cells (checked), Show tables and figures (checked), Clear Page Structure..., Show Order Panel, Help, and Close.

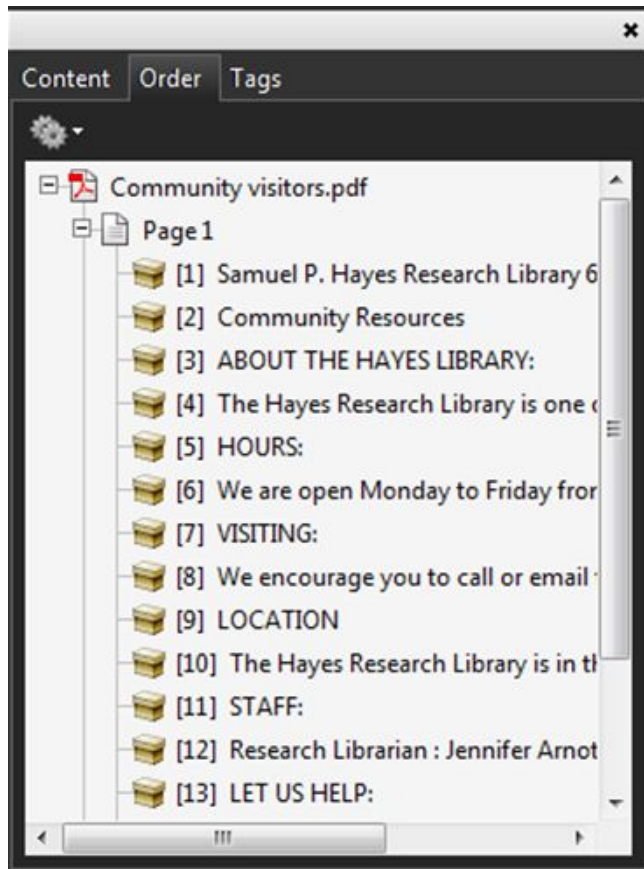
PDF structure: unedited sequence



PDF structure: 5 minutes of editing later



PDF structure: revised order



Known problem points

- PDFs, handouts, etc.
- Image display modules (slideshowes, lightboxes, etc.)
- Tables
- Forms
- Timelines
- Height / angle / physical access (braille, tactile objects)

Is this yours to fix?

- Provide accessible options.
- Some people choose tools that limit options.
- That's their choice.
- Example: JavaScript

Examples

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Annual report / publication access

- We have annual reports from our institution and others online.
- Internet Archive provides OCR (unedited). No internal navigation.
- Difficult to navigate for screen readers.

Solution:

- Transcribe manageable segments for researchers on request.
- Format in document with headers / other navigation.
- Ongoing volunteer for some of these tasks (can be remote).

Online exhibit with clippings

- [Halifax Explosion exhibit](#) includes clippings and correspondence.
- Wanted to make exhibit fully accessible.
- Feedback: multiple transcription pages more frustrating to navigate

Solution:

- Transcriptions on one single page with headers for clear navigation.
- Anchors used to bring people to specific transcription and back to exhibit.
- Feedback: told us not necessary to anchor footnotes.

History timeline

- Timeline for internal awareness of institutional history.
- Physical and [online components](#).
- High traffic area, students who may remove pieces.

Solution:

- Extensive experimentation for modular, inexpensive design.
- Several rounds of feedback groups for height, labelling, layout explanation.
- Design of fully accessible web timeline (many timeline options aren't.)

Questions?

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