Access for All
Creating an Accessible Platform

Emma DiPasquale
Fulcrum Community Manager
ejdip@umich.edu
@ejdipasquale
Fulcrum Overview

- Community-based, open source publishing platform
- Developed by Michigan Publishing at UM Library with support from the Mellon Foundation
Our Values

 Accessibility - accessibility statement, public VPAT 2.1

 Discoverability - usage reports, MARC, aggregators, Google Scholar

 Durability - permanent identifiers, institutional repository

 Flexibility - agile development, Samvera/Fedora Community
Partnership Models

- Single Title Hosting, Hosted Publisher, Hosted Collection

Fulcrum Services

We recognize that some of our partners have fully-staffed production departments, and some don’t. For both hosted collection and hosted publisher partners, Fulcrum offers a suite of à la carte publishing services, taking advantage of the expertise of Michigan Publishing.

- Copyediting and Proofreading
- Interior Design and Typesetting
- Cover Design
- E-Book Creation (EPUB, Kindle)
- Accessibility Upgrades
- Digitization and Optical Character Recognition
- Print on Demand, Digital, and Offset Printing
- Print and E-Book Distribution
- Sales via Branded Shopping Cart and Amazon
- Long-term Preservation
The Dog and Pony Show (bring your own pony)

by Holly Hughes

This is just about dogs. I want to warn you, the title is not a metaphor. When I say this is about dogs I mean: THIS IS ABOUT DOGS, PERIOD. Some of my friends got excited when I said that I was writing about the dogs. They thought that was just the beginning of the first sentence, and I would take them on a journey. I would lead them through some woods, the dogs all around, but there was a path that led to a house I had been building and I would take them inside and leave the dogs outside. They would kick around if you introduce a literary device at the top of the show it has to come back. The house would be full of dark wood and deep meaning, and it would have a nice view of the human condition.

But this is not about the human condition. A lot’s been said about it. I have nothing original to add.

I was in such a house once, and it didn’t go well. I was invited to the house of a rich art collector, as opposed to the home of all the impoverished collectors. See, those kinds of nice remarks are a sign that I should perhaps have declined the invitation, but no, I went.

The house was so beautiful, you almost didn’t know it was a house; it was so well situated in nature. This show isn’t about nature either. But the house — it was crouched behind the garden and popped out at the last minute. Glass. How do you get inside?

Someone opened the door. I thought it was a window and let me in. Drinks appeared and I drank them and we talked about art, and we talked about art and we talked about — art.

Then it was time to leave. I was shown to the door, but the houses was not very specific. I just took a path, and I made a bad guess and ran into a wall. I left the beautiful house and realized back to my battered-up Isuzu Toyota and proceeded to bleed all over it.

See, that’s another thing this show is about: It’s about my compulsion to insert the word “bleeding” into any sentence; it’s what I do. I have Isuzu Toucan syndrome. I am like the compulsive streaker who sees any vertical surface as an excuse to do some more streaks.

And I also come from another place and time. Let me set the scene for you. I come from the place and time where vaginas run the earth. Not like it is today in your culture when the vaginas stay underground until one day in February when they all pop out to see if they catch their own shadow.

Of course that is a figure of speech. Vaginas don’t have eyes. You know that. That’s why we have the criterion, which is the eyes and ears of the vagina, and watch over the vaginas like a shepherd over a flock.

Video excerpt from The Dog and Pony Show (Bring Your Own Pony), written, directed, and performed by Holly Hughes.
Building an Accessible Platform

- **Winter 2018**: collaboration with *Michigan State University Usability and Accessibility Research Consulting* (UARC)
- Testing by assistive technology users, identifying:
  - missing image descriptions for assistive technology navigation
  - missing captions and transcripts for video and audio content
Building an Accessible Platform

- **Summer 2018**: Rackham Public Engagement Fellow, Luke Kudryashov conducted accessibility evaluation of Fulcrum

- Completed a [Voluntary Product Accessibility Template (VPAT) Version 2.1](https://example.com/vpats)
  - Extent to which Fulcrums meets [WCAG 2 AA Standards](https://example.com/wcag2) (currently WCAG 2.1 AA) and Section 508 of the U.S. Rehabilitation Act is measured and reported in VPAT
Fulcrum E-reader Compatibility

- Text zoom features in e-reader
- Operating system contrast features
Fulcrum E-reader Compatibility

- Zoom controls on images
- AblePlayer, fully accessible cross-browser HTML5 media player
Accessibility Statement

- Transparent about compatibility and known issues with platform and e-reader

Screen Reader Compatibility

Fulcrum should be compatible with most major screen readers, but is optimized for use with NVDA in Firefox. New features are tested with NVDA in Firefox and VoiceOver in Safari. Fulcrum should be compatible with recent versions of the following screen readers:

- JAWS
- NVDA
- VoiceOver

The site should also be compatible with:

- basic operating system screen magnifiers and contrast settings
- accessibility browser extensions, such as Read Aloud (text to speech), Zoom Text Only (magnifier), and High Contrast for Chrome
- speech recognition software
- operating system speech packages

Known issues

For readers using NVDA:

- When changing location in the Fulcrum E-Reader using the navigation slider, each location is read only as a number. This number indicates the percentage of progress through the book (out of 100%).
- In the Fulcrum E-Reader, books containing embedded media have links that read as “Fulcrum logo” rather than the name of the media element. These links will take you to the media page for each embedded image, video, or audio file.
- In the Fulcrum E-Reader, alt-text image descriptions will be read when the embedded image is selected via the TAB key, but will not be read automatically via continuous reading. Alt-text image descriptions can be accessed by selecting the embedded image via keyboard controls or by following the link to the full image media page.
- In the Fulcrum E-Reader, when searching inside the text of a book and following a search result, the matched term in the text is indicated on the page only through visual highlighting of the matched text, but the excerpts and chapter locations are accessible through screen reader technology.
- Screen reader users are not notified when moving between pages in the Fulcrum E-Reader.
- In the monograph catalog or book title pages, “Table of Contents” is the default tab. To get to other tabs on that page, navigate to the “Table of Contents” heading and press the right arrow key.
- In the media pages, “Info” is the default tab. To get to others tabs, navigate to the “Info” heading and press the right arrow key.
Creating Accessible Content

- Apex spec for EPUB 3
  - deeper semantic markup helps users with screen readers more easily navigate book
  - easier to add alt-text and long descriptions
- Describing Visual Resources Toolkit
- Metadata Ingest Log
Our vision is to make Michigan Publishing an accessible publishing organization: producing accessible publications, implementing accessible systems, and effecting change among peers and partners by maintaining a high standard of accessibility.
What’s Next

• Accessibility Task Force with Stephanie Rosen, Accessibility Specialist

• Goals:
  ○ Make most publications adhere to our Accessible Book Standard by June 2021
  ○ All titles published after June 2021 to meet Accessible Book Baseline
  ○ Fall 2019 UMP titles will begin aiming for the Baseline
## Accessible EPUBs

<table>
<thead>
<tr>
<th></th>
<th>format</th>
<th>code</th>
<th>metadata</th>
<th>img</th>
<th>Data tables</th>
<th>Video</th>
<th>Audio</th>
<th>Lang</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>DRM-free, ● EPUB ● PDF?</td>
<td>HTML with headings</td>
<td>Schema</td>
<td>● <code>&lt;alt&gt;</code> is not empty</td>
<td>If html, ● <code>&lt;table&gt;</code> is accessible if img ● <code>&lt;alt&gt;</code> is not empty</td>
<td>● See baseline video</td>
<td>● See baseline audio</td>
<td>● <code>&lt;lang&gt;</code> of publication is identified</td>
</tr>
<tr>
<td><strong>Standard</strong></td>
<td>DRM-free, ● EPUB that follows Fulcrum Spec</td>
<td>Semantic HTML</td>
<td>Schema</td>
<td>● <code>&lt;alt&gt;</code> is not empty ● Image has a text equivalent</td>
<td>If html, ● <code>&lt;table&gt;</code> is accessible if img ● <code>&lt;alt&gt;</code> is not empty has text equivalent</td>
<td>● See standard video</td>
<td>● See standard audio</td>
<td>● <code>&lt;lang&gt;</code> of individual sections and phrases are identified</td>
</tr>
<tr>
<td><strong>Special</strong></td>
<td>DRM-free, ● EPUB that follows Fulcrum Spec</td>
<td>Semantic HTML</td>
<td>Schema ONIX</td>
<td>● <code>&lt;alt&gt;</code> is not empty ● Image has effective, quality description, in line with Toolkit</td>
<td>● Includes accessible html <code>&lt;table&gt;</code> as primary or secondary version ● Includes some textual description</td>
<td>● See special video</td>
<td>● See special audio</td>
<td>● <code>&lt;lang&gt;</code> of individual sections and phrases are identified</td>
</tr>
</tbody>
</table>
## Accessible Video

<table>
<thead>
<tr>
<th>format</th>
<th>transcript</th>
<th>captions</th>
<th>languages</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>DRM-free</td>
<td>Has accurate transcript</td>
<td>Not required</td>
<td>If multi-language, has transcript file in language equivalent of the main language of the book</td>
</tr>
<tr>
<td>Standard</td>
<td>DRM-free</td>
<td>Has WebVTT formatted transcript</td>
<td>Has WebVTT formatted captions</td>
<td>If multi-language, has either transcript or caption file in language equivalent of the main language of the book</td>
</tr>
<tr>
<td>Special</td>
<td>DRM-free</td>
<td>Has WebVTT formatted transcript</td>
<td>Has WebVTT formatted captions</td>
<td>If multi-language, both transcript and caption files are provided for each language</td>
</tr>
</tbody>
</table>
# Accessible Audio

<table>
<thead>
<tr>
<th>format</th>
<th>transcript</th>
<th>captions</th>
<th>languages</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>DRM-free</td>
<td>Has transcript</td>
<td>Not required</td>
<td>If multi-language, has transcript file in language equivalent of the main language of the book</td>
</tr>
<tr>
<td>Standard</td>
<td>DRM-free</td>
<td>Has WebVTT formatted transcript</td>
<td>Has WebVTT formatted captions</td>
<td>If multi-language, has either transcript or caption file in language equivalent of the main language of the book</td>
</tr>
<tr>
<td>Special</td>
<td>DRM-free</td>
<td>Has WebVTT formatted transcript</td>
<td>Has WebVTT formatted captions</td>
<td>If multi-language, both transcript and caption files are provided for each language</td>
</tr>
</tbody>
</table>
Current Projects

- Collaboration with Deaf Studies Digital Journal (DSDJ)
  - Supported by a NEH Digital Humanities Advancement Grant through the spring of 2020
Resources

- Fulcrum Accessibility Statement
- VPAT 2.1
- Fulcrum Issue Tracker
- Accessibility Feedback Form
- Describing Visual Resources Toolkit
- Accessibility & Publishing by Stephanie Rosen