Accessibility and Inclusion in the Design of Library Systems

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[ https://tiny.cc/AltmanIDEAL19 ]
Preliminaries
Abstract
Attribution Statement

Workshop Participants:

- Amanda Rust, Northeastern University; Amy Deschenes, Harvard Library; Angie Brunk, Missouri Western State University; Brian P McNeilly, McNeilly Accessibility Consulting; Carli Spina, Fashion Institute of Technology; Chris Bourg, MIT; David Weimer, Harvard Map Collection; Emilie Hardman, MIT; George Kerscher, DAISY Consortium; Holli Kubly, University of Oregon; Ibrahim Dahlstrom-Hakki, TERC; Jasmine L. Clark, Temple University Libraries; Jiin Park, Simmons; Joanna DiPaquale, Union College; John Rochford, UMass Medical School; Jonathan Lazar, University of Maryland; Judy Ruttenberg, Association of Research Libraries; Julia Flanders, Northeastern University; Kate Deibel, Syracuse University Libraries; Kelsey George, University of Nevada, Las Vegas; Mare Parker-O’Toole, Newton Free Library; Mark Weiler, Wilfrid Laurier University; Mattie L. Clear, Northeastern University; Molly Bragg, Duke University Libraries; Nicole Joniec, Science History Institute; Salwa Ismail, Georgetown University; Sari Altschuler, Northeastern University; Sina Bahram, Prime Access Consulting, Inc.; Stephanie Rosen, University of Michigan Library; Sue Kriegsman, MIT Libraries; Ted Gies, Elsevier

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Disclaimer

These opinions are my own, they are not the opinions of my employers, collaborators, or project funders.

Secondary disclaimer:

“It’s tough to make predictions, especially about the future!”

- Attributed to Woody Allen, Yogi Berra, Niels Bohr, Vint Cerf, Winston Churchill, Confucius, Disreali [sic], Freeman Dyson, Cecil B. Demille, Albert Einstein, Enrico Fermi, Edgar R. Fiedler, Bob Fourer, Sam Goldwyn, Allan Lamport, Groucho Marx, Dan Quayle, George Bernard Shaw, Casey Stengel, Will Rogers, M. Taub, Mark Twain, Kerr L. White, etc.
Related Work

  https://www.taylorfrancis.com/books/e/9781351388726/chapters/10.4324/9781315143422-16

  https://publications.arl.org/Rapid-Fabrication-Makerspace-Services-SPEC-Kit-348/

- Van Tine, A. 2017, On Libraries and Neurodiversity 
  https://drmaltman.wordpress.com/2017/12/22/guest-post-graduate-research-intern-ada-van-tine-on-libraries-neurodiversity/

- Montgomery, K. 2018, CHI and the Future of Mobile UX 
Goals of the Project
Who Are Libraries For?
Libraries are for everyone… but not equally and all the time

For Everyone

- Libraries (should) have inclusive aims
- Libraries increasingly have a global audience

Not all the time

- Perfect access to all is often not possible
- Libraries can identify designated communities
- Different people face different access challenges
Libraries Systems Mediate Between People and Information

Discovery
Reference
Creation, Annotation, Collaboration
Access
Instruction
Forum Goal:
Explore how Library Technical Systems Impede Access

- Access for those with physical disabilities.
- Access for communities in the Global and Local South.
- Access for neurodiverse learners.
Desired Output: White Paper on Design

- Informed by workshop
- Co-authored with select workshop participants
- Targeting design principles and approaches specific to library systems
- *Open for public commentary in the fall*

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Specific Barriers
Participant Survey

- Questions on challenges, barriers, and initiatives
- Twenty-eight responses
- Full set of deidentified results will be made available on the web site
Survey themes: Access Challenges

- The standards for accessible formats are lacking.
- Translation of information across formats impose a high cognitive load
- Range of individual needs, many features of diversity
- Dearth of free/open tools for building accessible content
- Interfaces to library systems do not play nicely with assistive technologies.
Survey Themes: Drivers

- Vendors not responsive/do not have capacity for making accessibility changes
- Closed vendor-created/maintained systems eliminates ability to add accessibility features
- Compliance is not usability, which is not user centered design
- Intellectual property law limits ability to modify content for remediation
- No way to contribute remediated content back for resharing. (Repeated efforts/ redundancy)
Selected Provocations & Observations
“Many universities are newly concerned about disability and that concern is built around compliance as opposed to accessible design. There is also a push to introduce emerging technologies... without addressing previous accessibility limitations.”

“... a massive barrier is the lack of clarity around the assistive technologies particular user communities rely on to interact with the web and how to design library information systems that meet adapt to produce content that works with those assistive technology. For example, when designing web content, does a city library or university library actually have a clear sense of the assistive technologies relied on by their users? This is critical information.’
“We tend to assume patrons that are well-educated (so we interject nuance into our choices), neurotypical (so assume high executive functioning in the research process), easily connected to the internet, and fluent in English to a high degree (so provide significant amounts of jargon around function, assume all words are properly spelled, etc).

One of the ways in which, I think, we can see this gap is in ways we approach designing our systems. .... There are countless studies about technology *for* autistic people but not ones that consider their opinions when designing systems for wider use.”
“We spend too much time teaching and discussing just the high levels of accessibility. **We are not solving the last mile issues** in terms of delivering accessible versions to patrons, making remediation more efficient relative to the diversity of documents we see, and **we don't pressure vendors hard enough to meet standards.**”
Workshop Themes
Beyond Compliance

- Systems design and deployment needs to move beyond compliance
- ‘Access’ is needed, but not enough
- ‘Universal design’ is useful, but limited
- We need to
  - Design systems for adaption
  - Recognize the dimensions of human diversity
  - Be informed by expertise and empirical evidence
  - Include community members in design and evaluation
Technology Opportunities

- Technologies can make new affordances feasible…
- Intentional design is needed for affordances to broaden inclusion
Library Specific Design

Resources to Identify…

- What are **key user stories** about access, discovery, reference, instruction and annotation/collaboration capture exemplar challenges
- What are **exemplar personas** representing different communities
- What **interactions** between library systems and persona characteristics create barriers to success
- What **intersectionalities** especially complicate these interactions
- What **affordances** of systems would be most helpful in addressing these barriers
- What new **technologies** (e.g. VR, AI, Semantic web) could create ubiquitous/inexpensive affordances
Connections across communities

● Interaction between visual accessibility design and global accessibility / social justice
● Identify kinds of technology approaches generalize well across economic/resource disparities
● Identify successes and sustainability of community-created technologies
Further Readings

- **About the National Forum Project**
  - [https://libraries.mit.edu/creos/research/design-library-systems/](https://libraries.mit.edu/creos/research/design-library-systems/)

- **Forum presentation, essential readings, survey results, and bibliography**
  - [https://drive.google.com/drive/folders/18dEAZLkR4DhibABtgPiDvDYfVwoUWBb](https://drive.google.com/drive/folders/18dEAZLkR4DhibABtgPiDvDYfVwoUWBb)
Questions? Observations? Arguments?*

Now
(10 minutes)

or

Later
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*£1 for a five minute argument, but only £8 for a course of ten.