Optical Mechanics: The Ocularcentric Implications of Digital Collections

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The Issue

It occured to me rather late in the digital collections game, that our focus is centered primarily on what we and our users, can see. Realizing how problematic this is in terms of accessibility, I also began to wonder how most of the tech tools we use in this industry attempt to partially fix the problem of accessibility. Much like a bandaid covers a wound, we're not looking at preventing an injury, but rather responding to it.

The Issue, Cont’d

Our optical frameworks and alt-text are good beginnings, but they’re only helping a bit...

The content we digitize is ocularcentric, the methods by which we present content is ocularcentric, and the tech tools we’re more likely to use and advance (IIIF, screenreaders, magnification software) are either ocularcentric or put the onus of content access and use on the user.

My Framework

What are the accessibility implications of our ocularcentric bias? Is ableism encouraged through the authority structure inherent in digital librarianship? Is there a second layer of cognitive or implicit bias to consider during the creation process?

My Research

To answer these questions, I perused major digital collections from university libraries across the U.S. and collected statistics on what percentage of their collections are accessible by some means other than sight.

I conducted a lit review that involved the centuries-old epistemology behind ocularcentricity as well as the prevailing best practices in digital collections. I also looked into W.H.O statistics regarding vision, as well as social science studies of learning behaviors.
I began to wonder when the word ‘digital’ became synonymous with ‘nearly exclusively visual’ in libraries.

Definitions

Before proceeding, I'd like to discuss how I'm defining the terms I'm using, thereby drawing clear parameters around this discussion. Ocularcentricity, or ocularcentrism as defined by Oxford Reference, is the "perceptual and epistemological bias ranking vision over other senses in Western cultures". Similar phrases incl: 'hegemony of the eye', 'visualism', 'privileging vision over other means of sensory perception'.

Definitions

Abelism is defined as intentionally discriminatory beliefs or practices against those who are Othered by their physical, intellectual, or psychiatric disabilities. Since unintentional discrimination is generally classified as ignorance, I'd prefer to remove the intentionality from this discussion, as any ableist practices are discriminatory, intended or not.

Digital collections in this case refer to items digitized from special collections; not theses, dissertations, web-only serials, databases, or streaming services.

‘Illustrating’ Visual Bias

The Roots of Ocularcentricity

This “vision-generated, vision-centered interpretation of knowledge, truth and reality” (Kavanagh, 445) spans over 8 centuries in the Western hemisphere. Shaping “organizational theory and practice” (Kavanagh, 445) and therefore librarianship, ocularcentricity as a paradigm only encounters criticism through the ‘lens’ of philosophical discourse and distinction.

The Roots of Ocularcentricity Cont’d

There is a gaping and notable lack of literature that discusses ocularcentricity as ableist and/or discriminatory, as an epistemological modality or an operationalized truth. I found a couple sources discussing ocularcentricity as ableist in academia and museums (& the latter born-digital resource is no longer accessible online)...

Accessible in Name Only

By no means an indictment of digital collections as a profession or concept, but the primary method while interacting with these collections is sight.

This proves problematic for a several reasons. Not only is this an accessibility issue for those with partial or no sight (the low estimate is 20% of the global population) , research tells us that 30% of people learn via information that is paired with audio components (‘auditory learning’).

Accessible in Name Only, Cont’d

Additionally, the onus of paying for accessibility software is not on the institution digitizing and creating ‘access’ to data; it is on the user. Screenreaders cost an average of $1000 for home editions. This pricey reality directly correlates to the statistics on who, globally, uses accessibility software. Ex: (a combined stat) 83% of screenreaders are used in Canada, the U.S., Europe & the U.K.

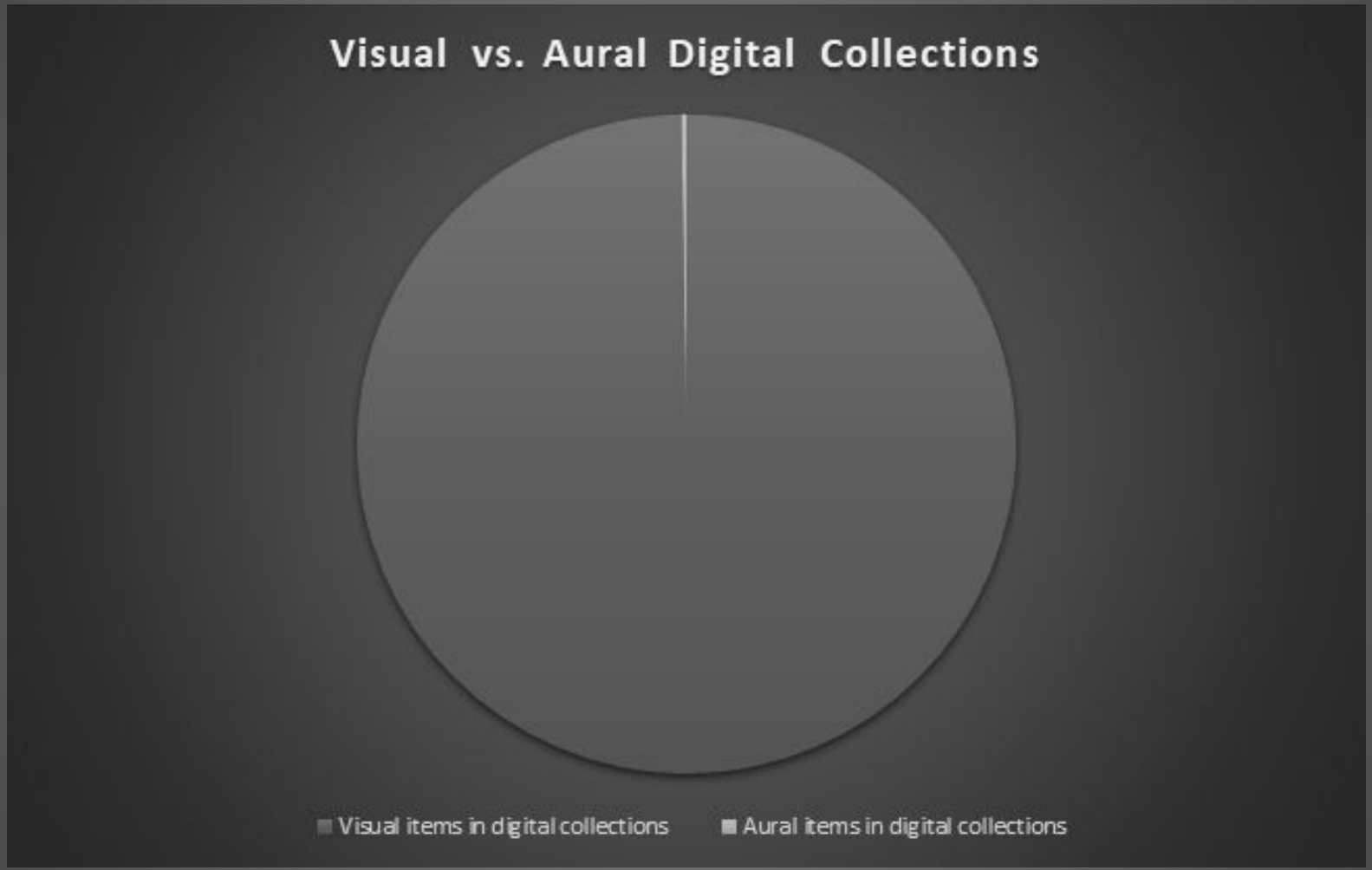
Digital Collection Assessment

I conducted a small assessment of 25 U.S. state university library and ivy league digital collections repositories. Repositories were chosen based on their searchability (let's not get started about accessibility via searching!) and large size (over 50,00 items).

Digital Collection Assessment

The 25 digital collections repositories held a cumulative 25,952,853 items, with a cumulative 65,928 of those items being audio. This meets the definition of both ocularcentric and ableist.

Eventually, 50 university libraries will be evaluated based on these simple criteria, for the purposes of my forthcoming published paper.


Visual vs. Aural Digital Collections
Visual items in digital collections
Aural items in digital collections

Hegemony & the Cycle of Information Representation

What are the accessibility implications of this bias?

No surprise, the implications are fairly apparent and not favorable in the least. With very few collections signaling as audio, and with screenreaders relying on alt-text/alt-tags for describing images to the completely or partially blind (just now becoming a best practice), visual digital collections are in the clear majority. What this indicates is not only that the content being digitized needs to evolve to meet needs, but that the selection process might be inherently biased towards sight.

What are the accessibility implications of this bias? Cont'd

Is there a reason we cannot provide audio transcriptions along with text transcriptions? Is there something stopping us from selecting more audio materials? Are we not collecting enough aural information in special collections libraries? What policies are dictating our collection development, curation, selection, digitization, and description (metadata)?

Access to Content & Literacy

Whether presenting digitized or born-digital content online, we're clearly choosing to follow the well-trod path of visual bias. By making these authoritative choices, we are reinforcing the cycle of discrimination that has been present throughout the ages. This is hegemony; social and educational hegemony. This is active discrimination, that perpetuates the trope that literacy is for the chosen, not for all.

Access to Content & Literacy

“literacy is. . . an infrastructure that regulates movement. This metaphor of literacy as mobility is of utmost importance to the intersections between literacy and ability, illiteracy and disability. Literacy has been used to tightly control the movement and rights of disabled people for centuries; this deeply affects what literacy is and what it can do for anyone.” (DoImage, ch. 3).

Solutions

- *Multimodal digital collections!* “Multimodality is communication and composition [is] textual, linguistic, spatial, aural, and visual resources” (DoImage, ch. 3)

- Pair visual collections with audio narratives that read metadata and intonate/emphasize important information for users

- Take the time to create transcripts for audio, video, and visual materials, instead of claiming it takes too long (a refrain heard across institutions)

Solutions

- Create, disseminate, & analyze results from a user survey regarding content, access, use, & accessibility needs
- Take the time to create alt-tags/alt-text in digital collections repositories
- Engage in not only slow digitization, but slow metadata, slow digital collection planning

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Thank You!

Please be in touch with ideas, questions, etc.

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