



# **DIGITAL PRESERVATION AND ACCESS TO BORN-DIGITAL COLLECTIONS:**

## **A CRITICAL DISABILITY AND INTERSECTIONALITY-INFORMED ASSESSMENT OF PRAXIS**

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# ACKNOWLEDGEMENTS

As a cishet, able-bodied, white woman, I acknowledge my privileges and recognize the unique perspectives and lived experiences of those in the disabled and marginalized communities. I have attempted to approach this research with care and respect and recognize that I am not a representative voice of these communities.



# INTRODUCTION

## PROBLEM STATEMENT

Great variabilities across historic and current born-digital collections create challenges for preservation and access

## RESEARCH QUESTION

How does computing impact accessibility and marginalization of user communities for born-digital materials?

## THESIS

Computer hardware and software design, algorithms, and metadata implicitly impact equitable preservation and access to the ever-increasing amounts of born-digital acquisitions.



**“THE FIELD OF  
CRITICAL DISABILITY  
STUDIES HAS SELDOM  
CONVERGED WITH LIS  
RESEARCH.”  
-EMMA MAY**



# LITERATURE REVIEW

- Computer science
- Computing history
- Accessibility Legislation
- LIS Research
- LIS Accessibility Guidelines
- LIS Inclusivity Guidelines



# LITERATURE REVIEW

- Computing bias study and accessibility legislation begins in the 1990s
  - (United Nations; Friedman & Nissenbaum, 1996)
- 3-part framework for identifying the biases in computing: Preexisting, Technical, and Emergent (Friedman & Nissenbaum, 1996)
- LIS research and guidelines focus on physical accessibility (2010-present)
- Growing consensus in Archival Science that access and use can be improved by highlighting authentic voices for the most marginalized communities (2020-present)



# THEORETICAL FRAMEWORK

## CRITICAL DISABILITY THEORY

Disability is a social construct and the disadvantages faced by those with physical, cognitive, and mental disabilities are the result of ableist perspectives and design

## INTERSECTIONALITY THEORY

Examines how overlapping social identities and circumstances are related to and the byproduct of various disadvantages and discrimination



# FINDINGS: ABLEISM

Computing hardware and software built for the users with full:

- visual & auditory functions
- limb symmetry
- full physical control
- reading ability & comprehension
- mid-level cognitive function

Assistive Technologies developed to address these differences

- Bulk is after 1990s Accessibility legislation
- Much iteration on AT hardware and software since
- Versions and operating systems create idiosyncrasies/challenges



# FINDINGS: BIGOTRY

- Technologies present as objective, scientific, mathematical
- Biases are intangible and easily overlooked
- Unintentional dominance of white, cishet, American men developing computer hardware and software
- Software increasingly dependent on algorithms, machine learning, AI - risks of sustaining/growing bias in the code





# IMPLICATIONS

## FUTURE RESEARCH

- More CDT and Intersectionality Theory informed research on digital collections
- Emulation impacts
- Disability and marginalized user experience studies

## THEORETICAL

- Digital Preservation
- Archival Administration
- Curatorial and Collection Development

## POLICY

- Digital Preservation Actions
- Description and Arrangement
- Terms of Access and Use



# PRACTICAL RECOMMENDATIONS: BORN-DIGITAL COLLECTIONS

## DIGITAL PRESERVATION

- Appraisal for storage
- Copies of content with accommodations
- Preservation metadata

## ACCESSIONS AND PROCESSING

- Flexible workflows to allow modification for accommodation requests
- Document and publish limitations

## ACCESS AND USE

- Easy and obvious to request accommodation
- Educating users
- Mindful of users' vulnerabilities
- Active listening



# CONCLUSION

## LIMITATIONS

Research conducted by someone outside the disability and marginalized communities

More comprehensive investigation on the potential for remediation or hindrance of AI

## FINAL THOUGHTS

User-first approaches can reduce risks of causing harm from inherent biases rooted in ableism and bigotry

Prioritize the humanity of workers and users



# THANK YOU

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