

Connecting Communities through a Passion for Data Visualization in Libraries:

The Visualizing the Future Symposia

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Visualizing the Future Symposia

An IMLS funded National Forum on Data Visualization in Libraries



<https://visualizingthefuture.github.io>

About the grant

From the [Visualizing the Future About page](#):

“This grant aims to create a diverse community that will advance data visualization instruction and use beyond hands-on, technology-based tutorials toward a nuanced, critical understanding of visualization as a research product and form of expression.”

This project was made possible in part by the [Institute of Museum and Library Services](#), RE-73-18-0059-18.



Co-investigators



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Fellows



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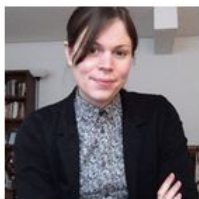
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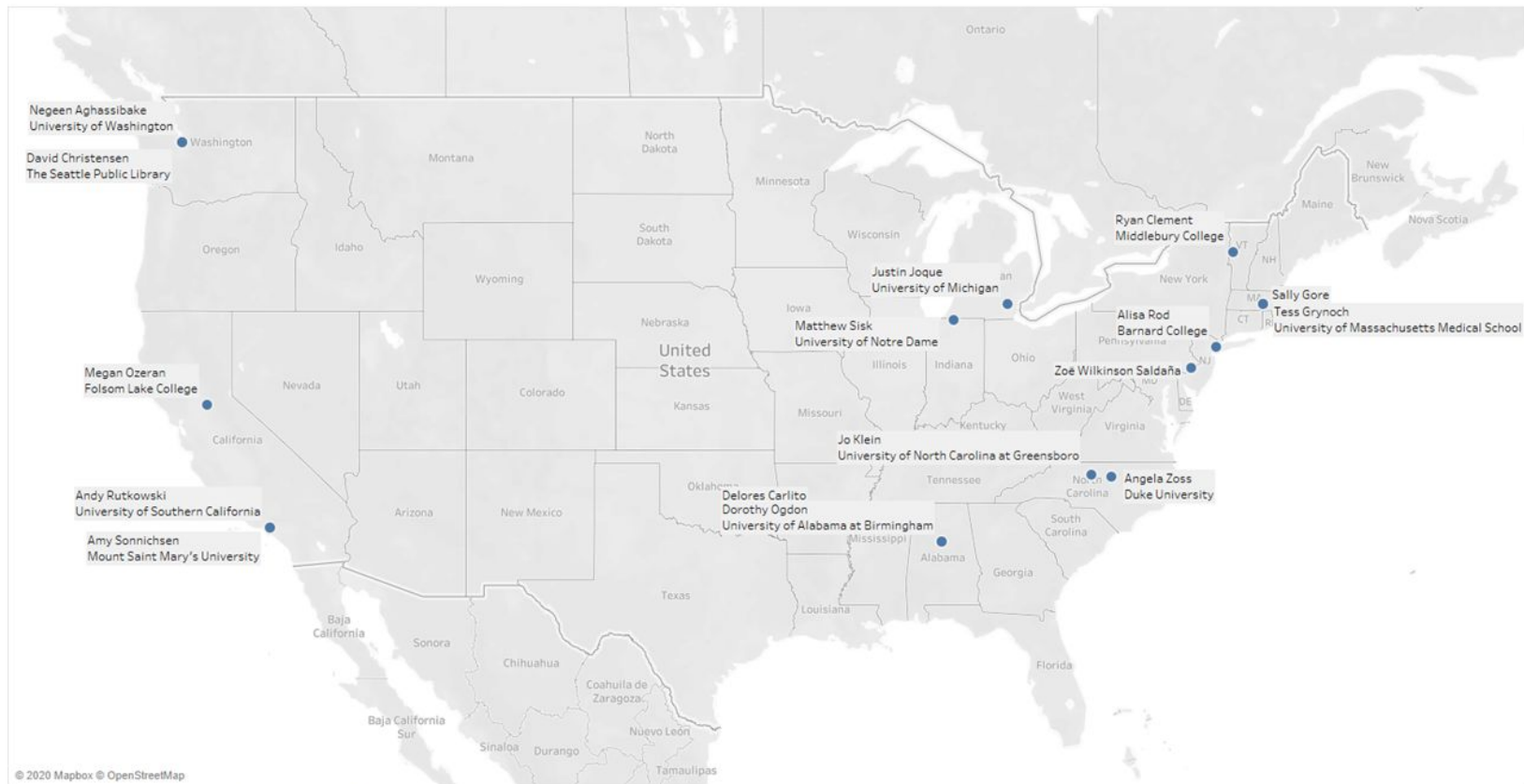


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Map based on Longitude (generated) and Latitude (generated). The marks are labeled by Name and Institutions. Details are shown for State and City.



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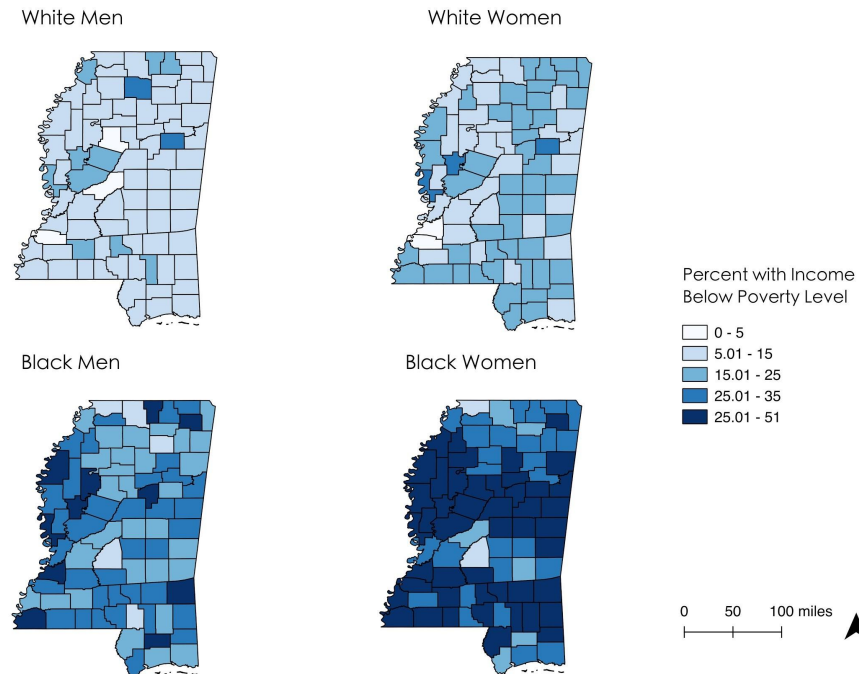
Why Libraries?



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Data Viz in Communities and Communication

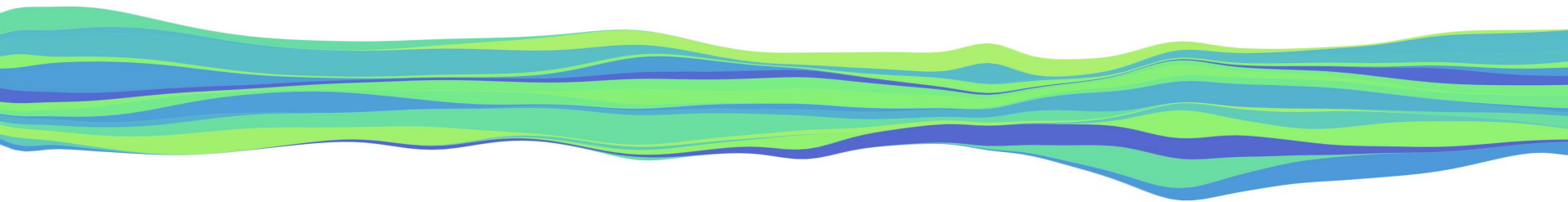
- Data viz as a component of information/data literacy
 - Data viz as empirical evidence
 - Recognizing misleading visualizations - applying critical inquiry to analyzing/interpreting data viz
 - “understanding of visualization as a research product and form of expression”



Source of image: Nadasen, Premilla, Fatima Koli, Alisa B. Rod, and David Weiman. "Mississippi Semester: New Social Justice Approach to Teaching Empirical Reasoning in Context." *Numeracy* 12, Iss. 1 (2019): Article 3. DOI: <https://doi.org/10.5038/1936-4660.12.1.3>

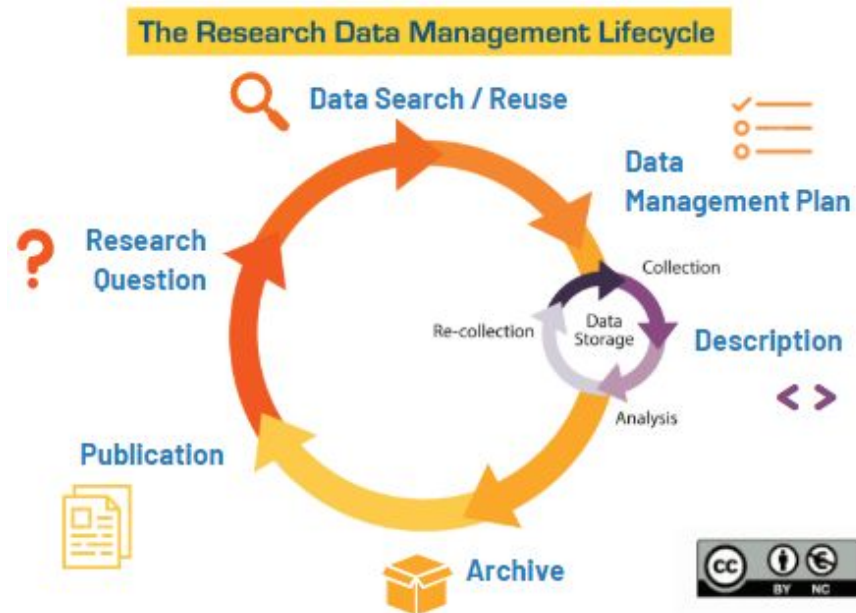
Librarians, Libraries & Data Viz Instruction

- The Library is disciplinary agnostic
 - Modularized nature of data viz training
 - Instruction potential for various skill levels as needed
 - Public access!
- Long-term strategic vision of library as leaders in the data viz realm
 - Community-driven mapping of data viz as a literacy



Librarians are Information Professionals

- Work with research data to provide support and services
 - Finding and evaluating research
 - Preparing data
 - Using data (and software) in analysis
 - Preserving and sharing data
- Librarians are data users too!



Adapted original source: The University of California, Santa Cruz, Data Management LibGuide, Research Data Management Lifecycle, diagram, viewed 26th July 2019
<http://guides.library.ucsc.edu/datamanagement>

Research Projects: Social Justice, Ethics, & Empathy

- Data visualization and social justice work in libraries - Negeen Aghassibake
- Ethics of data visualization - Megan Ozeran
- Data storytelling for social change - Zoë Wilkinson Saldaña
- Ethical community health data visualization - Amy Sonnichsen
- Ethically visualizing aggregated community data - David Christensen
- Data visualization + empathy - Sally Gore & Tess Grynoch



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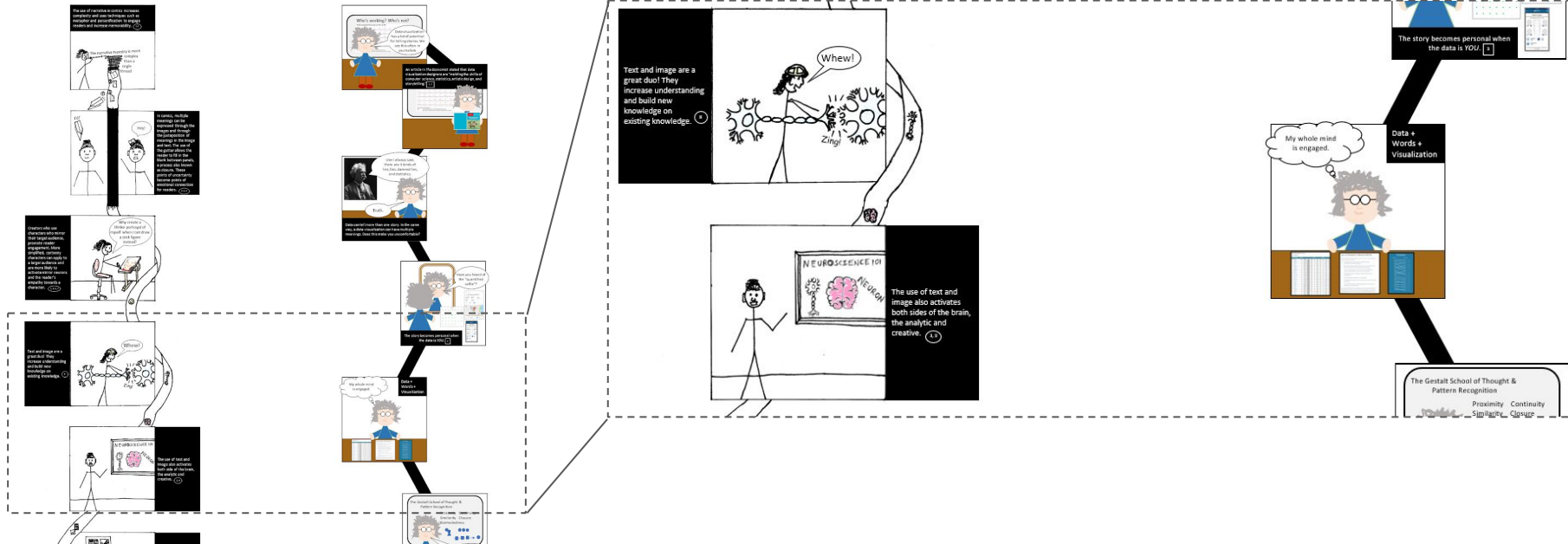
Data Visualization + Empathy

Sally Gore & Tess Grynock

Data Visualization + Empathy

By Sally Gore and Tess Grynock
Lamar Sautter Library, University of Massachusetts Lowell

Special thanks to the team of young artists in medical education and allied data visualization (DVA) teams to explore about the medical skills to ensure accurate, safe, fast and fun from your presentation.



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Research Projects: Data & Information Literacy

- Critical data visualization in first-year courses - Ryan Clement
- A blended framework for visualization literacy concepts - Dorothy Ogdon & Delores Carlito
- Visualizing spatial uncertainty - Matthew Sisk
- Assessing spatial visualization learning - Alisa Rod
- Behind the scenes: The metadata of data visualization - Jo Klein



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Assessing Spatial Visualization Skills

Alisa Rod

- Barnard ERC offers series of [GIS workshops](#)
- Develop an assessment tool to evaluate data viz learning goals:
 - Apply principles of layout and visual design while avoiding misrepresentation
 - Create accurate digital spatial visualizations using GIS software
 - Critically analyze visualizations and propose improvements
 - Acquire critical skills of quantitative literacy
- Findings so far: Takes minimum of 5-6 workshops to achieve goals



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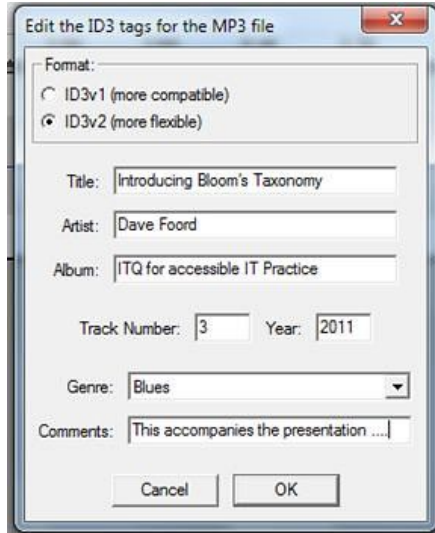
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Behind the scenes: The metadata of data visualization

Jo Klein



["Metadata Screenshot"](#) by Dave Foord is licensed under CC BY-NC-SA 2.0

Areas of Research

1. Challenges and Areas of Need
2. Metadata Standards, Schemas, and Tools
3. Instruction, Services, and Advocacy

Findings So Far

- Are data visualizations independent entities (“works”)?
- Schema use in example repository



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August 2019 Meeting



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Deliverables

- Whitepaper
- Instructional materials
- Examples/ Example repository
- Assessment resources
- Materials/ Resources for new librarians
- Podcast



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Summer 2020 Meeting



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