Visualizing the Future Update

An IMLS funded National Forum on Data Visualization in Libraries (RE-73-18-0059-18)

September 22

While we wait: Tell us about yourselves

Slides: <u>http://bit.ly/VTF-Sep22</u> Website: <u>visualizingthefuture.github.io</u>

While we waited for people to join, we shared a poll asking people the following:

- What best describes your current work situation?
 - o Student
 - Public library
 - Academic, research, or special library
 - Education (primary, secondary, academia)
 - Industry
 - Government
 - Non-profit
 - Freelance visualization professional
 - Other
- My primary role is to do visualization support (i.e., public services) in a library.
 - Yes
 - **No**
- What resources would be most helpful to you?
 - Training related to visualization
 - Community of practice
 - Shared instructional materials
 - Shared techniques, best practices
 - Mentorship

Results showed that most of the audience was from academic/research/special libraries. Only 22% said that their primary role was to do visualization support. Very few people requested mentorship, but almost half felt that training related to visualization and shared techniques/best practices would be helpful.

Logistics

- Live auto-captions are available look for "live transcript" button
- Type questions in the Q&A box at any time
- Up-vote others' questions and we will answer in order of preference
- Send a chat to the panelists with any technical issues
- To share your own suggestions/thoughts via chat, make sure to change from "All panelists" to "All panelists and attendees"

Co-Investigators



Justin Joque Visualization Librarian University of Michigan



Angela Zoss Assessment & Data Visualization Analyst Duke University



Andy Rutkowski Visualization Librarian University of Southern California



Visualizing the Future Symposia An IMLS funded National Forum on Data Visualization in Libraries This project was made possible in part by the <u>Institute of Museum and Library</u> <u>Services</u>, RE-73-18-0059-18.





A bit of background on Visualizing the Future

This grant grew out of our desire to create a community around data visualization that focused on "teaching beyond the tool" focusing on literacy, design and communication. The three of us met at IASSIST (International Association of Social Science Information Services and Technology) and through our general work doing data visualization but felt that data visualization in libraries did not have a clear conference home. So the grant sought to assemble a cohort of fellows to engage in research and sharing knowledge about supporting data visualization in libraries.

Purpose of the grant

Visualizing the Future is a project to develop a literacy-based instructional and research agenda for library and information professionals with the aim to create a community of praxis focused on data visualization.



Visualizing the Future Symposia An IMLS funded National Forum on Data Visualization in Libraries This project was made possible in part by the <u>Institute of Museum and Library</u> <u>Services</u>, RE-73-18-0059-18.



Advisory Board

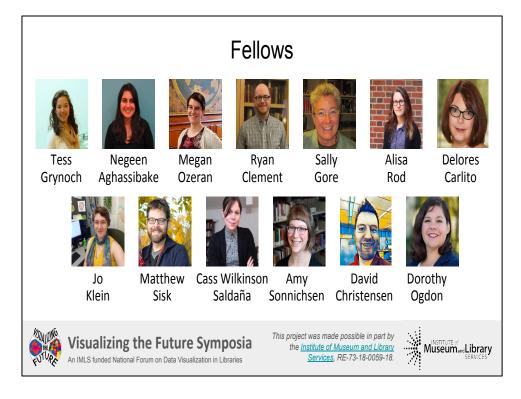
- Nancy Bartlett (University of Michigan)
- Marta Brunner, Ph.D. (Skidmore College)
- Jonathan Cain (University of Oregon)
- Makiba Foster (African-American Research Library and Cultural Center, Broward County Florida)
- Jason Griffey (Fellow at the Berkman Klein Center for Internet & Society at Harvard University)
- Bergis Jules (Project Director for DocumentNow, Shift Collective)
- Thomas Padilla (University of Nevada at Las Vegas)
- Miriam Posner (University of California, Los Angeles)
- Jennifer Vinopal (The Ohio State University)
- Elaine Westbrooks (University of North Carolina at Chapel Hill)



Visualizing the Future Symposia An IMLS funded National Forum on Data Visualization in Libraries This project was made possible in part by the <u>Institute of Museum and Library</u> <u>Services</u>, RE-73-18-0059-18.



Early on in the project proposal process we assembled an advisory board to guide us in designing the grant and recruiting fellows. We are incredibly grateful for the feedback they provided us.



	Wha	Vhat have we done so far										
	Recruiting Fellows			Ann Arbor					Ann A	Conferences		
ne				Preliminary Projects						Group Projects		
Year One				Virtual Monthly Meetings								
Υe	Dec '18	Jan '19	Feb '19	Mar '19	Apr '19	May '19	June '19	July '19	Aug '19	Sep '19	Oct '19	Nov '19
COVID regroup												
	Confere	nces								Community Building		
9	Group Projects											
Year Two	Virtual Monthly Meetings											
Yea	Dec '19	Jan '20	Feb '20	Mar '20	Apr '20	May '20	June '20	July '20	Aug '20	Sep '20	Oct '20	Nov '20

We initially intended to have two in person meetings as we worked first on individual research and then shifted to working on projects in groups. But, due to the pandemic we have had to postpone our second in person meeting which was initially scheduled for this summer (2020). We are in the process of applying for an extension and hoping to be able to meet next summer. In the meantime we are continuing to meet virtually and are starting to share some of our projects.

August 2019 in Ann Arbor

- <u>Lightning talks and position</u>
 <u>statements on preliminary projects</u>
- Invited speaker on ethics of virtual reality - Lisa Nakamura
- Brainstorm grant deliverables
- Begin project work

See full report and assessment



At the August 2019 fellows shared the results of their initial individual research. The talks and positions statements fellows wrote before coming are available at the link in the slide as well as a full report and assessment of the meeting.

Responses to COVID-19

- Scale back expectations (e.g., conference travel, project work)
- Set aside time to share experiences and discuss COVID at work and personal lives
- Cancel summer 2020 event
- Ask for buy-in from fellows to extend grant
- Brainstorm different activities, funding structures

Justin

Reflections

Andy reflected on how one of the most important things personally and professionally during these past few months is considering our work in the context of COVID and this ongoing pandemic. One of the aims of this grant has been to facilitate dialogue and conversation among librarians doing work in visualization and to create a community in which we can support our work. What I think I might be most proud of in our grant work thus far is in how we came together to be supportive, flexible, and recognize the seriousness, the difficulties, and the challenges that we have all been going through during these past few months and that we will continue to go through. We have as a team and cohort grown together and it has been inspiring to be able to work with such a caring and thoughtful group of individuals.

Angela reflected on how open, casual discussions with organizers and fellows have been some of the most rewarding aspects of the work. We hope to encourage even more of these with our Viz and Tell sessions (see details later on in slideshow). Angela also feels that it's been rewarding to stay flexible to allow the Fellows to have an impact on the goals and outputs of the grant. The organizers spend a lot of time thinking through what kind of infrastructure and support will be best for the group and the work we need to do, but the fellows have really brought a lot of creativity and helped shape the work into something that we think will really have an impact.

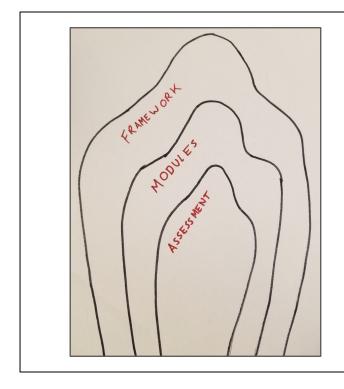
Project Update: White Paper

Negeen Aghassibake, Matthew Sisk, Justin Joque

Overview

- Why Do We Need Data Visualization Support in Libraries?
- Environmental Scan
- It Is About The People
- Services
- Literacies

We are in the process of writing a white paper about supporting visualization services in libraries focusing on the people involved and the literacies required for this work. We have a completed draft that we submitted to a special issue of the Journal of Interactive Technology and Pedagogy. We also intend to make a public version available for comment shortly. The sections of the white paper are listed in the slide.



Project Update: Ethics Module

Tess Grynoch, Delores Carlito, and Dorothy Ogden

This project update is about a module that we have been working on which is about Ethics in Visualization.

• To step back, one of the grant project areas is focused on developing instructional modules around topics that we collectively identified are important to visualization and libraries. These modules would be adaptable and offered as templates for librarians to use in their own teaching and training. The image you see here was from our meeting last summer which captures part of the workflow in terms of working on these modules, with first working from a framework with threshold concepts, to then working on the modules themselves, and finally thinking about assessment.

Motivation

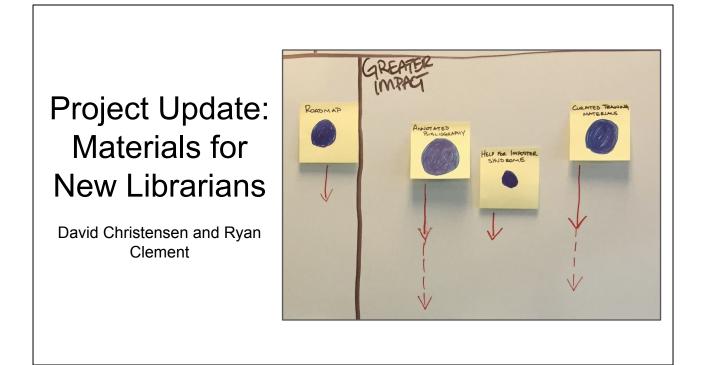
- Everyone in our cohort teaches in one capacity or another. Most librarians who do visualization are expected to teach as part of their day-to-day responsibilities.
- There are many topics and issues in visualization that do not have readily available tutorials, workshops, or materials. Especially in a library context.
- A considerable portion of teaching goes into doing research on visualization topics, both core topics and new/emerging topics.
- Having a set of teaching modules that addresses and frames important areas around teaching visualization would help to facilitate more critical approaches in how those topics are taught and also provide a way to collaborate and address those topics as a community.
 - Our motivation for developing these modules was the fact that just about everyone in our cohort teaches in one capacity or another and most librarians who do visualization work are expected to teach as part of their day to day responsibilities.
 - There is a clear lack of resources around teaching, especially for topics that tend to fall outside of more traditional tool based approaches.
 - In terms of teaching a considerable amount of time is often devoted to doing research and developing from scratch workshop/materials on visualization topics.
 - Having adaptable and community developed modules would help to facilitate more critical approaches in teaching.

Development

- We identified areas/topics that would benefit the broader visualization community. Including topics like accessibility, data visualization for social justice, participatory design and community data visualization, and others.
- Each topic is framed with <u>threshold concepts</u> that can be applied to larger disciplines and learning styles/levels.
- First module is on "Ethics in Data Visualization".

In terms of developing the modules:

- We collectively identified some areas/topics. Especially ones that are not well supported currently topics like accessibility, data visualization for social justice, participatory design and community data visualization, and others.
- One of the first modules that we decided to develop is one around ethics and data visualization. In deciding on this module a survey was created to assess our priorities and that is how we arrived at starting with this Ethics Module. Which I think is even more pressing today.
- Each topic is framed with threshold concepts that can be applied to broader disciplines and learning styles and levels.
- Our Fellow Tess Grynoch has taken the lead on developing this first module thus far with feedback from the cohort and Delores Carlito and Dorothy Ogden have been the lead developers of the threshold concepts which will be applied to all of the modules.
- The module is close to completion right now, it is in the form of a slide deck which can be easily adapted and used. It introduces the topic, has some clear learning objectives, suggested assessment questions, a bibliography, and an activity.



Materials for new librarians:

Another project area that we collectively agreed upon was developing a set of materials and resources for new librarians whose main focus and responsibilities are on data and visualization.

David Christensen and Ryan Clement have been responsible for developing this project with feedback from the cohort.

Motivation

- One shared experience that we all identified was not having access to resources and materials that could help in getting started in our current or previous positions.
- For many institutions, the roles and positions supporting visualization are new with little or no documentation that help to frame the position or provide a network of support during the first year.

The main motivation here was. Again. that for most of us we all had the shared experience of not having enough access to resources or materials that could help in getting us started in our current or previous positions.

We see that for many institutions the role of a visualization librarian or someone who supports visualization are new and often without an extensive framework or team in place. There is little or no documentation or materials to help guide or support that position, especially through the first critical months on the job.

Development

- Prioritize the roadmap and more essential training resources.
- People and building a community of support, both internally at your own organization and then beyond.
- Continue to curate a list of other resources and materials.
- Currently <u>live and available</u> to look at and share feedback.

Intro - Hello new data librarians!
 Roadmap

 Find your people. Make connect...
 Find your people. Make connect...
 Skill up

 People important to you

 Directory at your organization
 Other directories & communities
 Conferences

 Resources

 Portals / other
 Self-taught lesson
 Books
 Articles

In terms of developing the materials the roadmap and initial essential training materials were created first. Then materials about people and building a community of support both internally and externally. And then finally more curated resources that could be used later in the first year and beyond.

We envision this project as something that can be used by both new librarians and also by committees and other groups that might be trying to start up visualization services or roles that support visualization in their organizations.

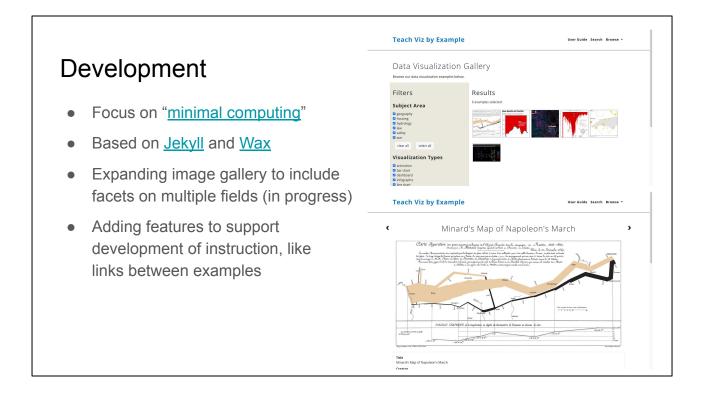
Teach Viz by Example \equiv **Project Update:** Welcome to the Teach Viz by Example repository! This is a space for the data visualization teaching community Teaching Viz By to find, share, and contribute exemplary data visualizations + visualization-ready datasets. Example Select an option below to get started: Cass Wilkinson Saldaña, Angela Zoss, Jo Klein, Coming soon: contribute your own resources! Amanda West https://visualizingthefuture.github.io/examples-repository/

This repository is really a work in progress, but you can see the beta version at the link above.

Motivation

- Visualization instruction is based on examples of visualizations and datasets that have certain properties
- Looking for examples seen to be a major barrier in the development of instructional modules
- Desire for a place to find and share examples, including annotations about what makes them useful for teaching

Even with pre-designed instructional modules, there is still so much need for new instructional materials. Sometimes you need to tailor something to a new audience, sometimes you want to capitalize on a new trend, sometimes you just have a need to highlight a certain technique (or problem) with visualization. Searching for example visualizations or datasets that are good for teaching can take a lot of time, and existing places where data are shared do not necessarily capture the information that would be useful to evaluate the visualization or dataset. We saw a need for a place really tailored to sharing and finding datasets and visualizations designed for teaching, especially when the teaching focuses on critical skills or literacy.



The tool, shown in the screenshots on the right, offers a gallery view and a view of an individual example, including metadata. We use a toolset including Jekyll (a static website builder) and Wax (a lightweight tool for digital scholarship around largely image-based collections) to support the idea of minimal computing - that lightweight tools allow for work to be shared and maintained much more easily. We are still working on the site and have plans for new features that will be especially useful for building up instructional material. We plan to start user testing soon and hope to have a wider release in the spring of 2021.

Coming up this fall: Viz and Tell

What is Viz and Tell?

An opportunity for information professionals interested in visualization to gather, share tips, ask questions, and build community.

Monthly virtual meetings, hosted by VTF Fellows and Organizers

Discussion summarized with a blog post afterward

Just as this webinar helps gather together people interested in visualization in libraries, we want to provide opportunities for more community discussion and interaction. We hope to create a setting where people can chat informally about specific topics related to visualization in libraries. To preserve insights from those discussions, we'll be writing up blog posts afterward that will be posted publicly.

Save these dates:

October Viz and Tell:

Teaching Data Viz in Libraries

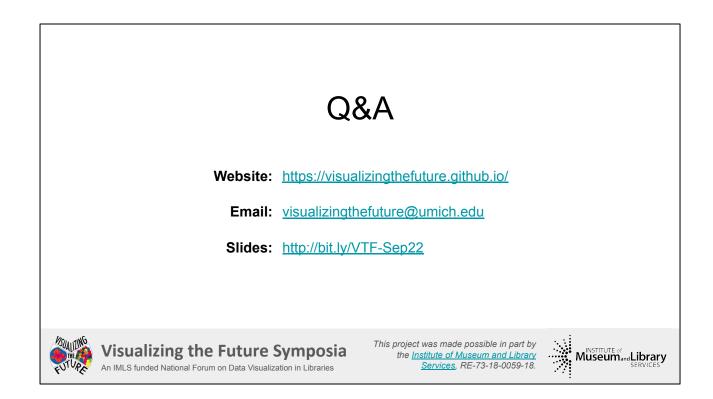
Tuesday, October 20: 2pm Eastern, 1pm Central, 11am Pacific

November Viz and Tell:

Visualization in Library Assessment

Tuesday, November 17: 2pm Eastern, 1pm Central, 11am Pacific

Details about our first two Viz and Tell discussions are available above. We will also post them on our website and share them with our mailing list. Zoom details to come!



Please see our video and blog post for a summary of the Q&A. The blog post and video will be shared on our website (<u>https://visualizingthefuture.github.io/</u>).