

CORONAVIRUS UPDATE: CMU libraries are currently open to CMU affiliates only. If you are a student, please click here to [reserve a seat \(https://cmu.libcal.com/r\)](https://cmu.libcal.com/r) to study.

Do you have a question about library services? You can reach out to us via our [Ask Us \(https://library.cmu.edu/help/ask\)](https://library.cmu.edu/help/ask) page or check out the latest updates from the University Libraries' [COVID-19 FAQ \(/node/2166\)](https://cmu.libcal.com/r).



Exploring your Relationship with Data through Art: Creative Prototypes for Future CMU Libraries Workshop (/blog/tartan-datascapes/05212021)



A mason jar of paintbrushes sits in front of a white background. Image courtesy of Debby Hudson on Unsplash (<https://unsplash.com/photos/MzSqFPLo8CE>).

Those who have taken workshops from CMU Libraries know that we offer several workshops a semester open to the CMU community and beyond that teach skills in data visualization, data management, collecting data, and communicating data. We often find that many of our workshop participants, particularly students, see the Libraries as a safe space to learn these data concepts, especially in cases where they may feel embarrassment or anxiety in seeking foundational data help in their own departments. We are so glad to be able to offer this space for data skill development to learners!

Now, folks who are familiar with *Tartan Datascapes* know that I like to approach data management education from a unique lens, generally based in popular culture (such as data management lessons we can learn from *What We Do in the Shadows* (<https://www.library.cmu.edu/blog/tartan-datascapes/10302020>)), and I have a passion for exploring how we can develop an enthusiasm for working with our research data. In my mind, if someone is feeling more enthusiastic and excited about their data, they may be more likely to care for it through data management practices! So, in the past year, I've started to think more about how to develop workshops that promote this data enthusiasm and help our campus explore their relationship with data. In October 2020, I stumbled upon the Frank-Ratchye STUDIO for Creative Inquiry (<https://www.cmu.edu/cfa/studio/index.html>) in the College of Fine Arts

(<https://www.cmu.edu/cfa/index.html>) here at CMU and grants offered through the Frank-Ratchye Fund for Art @ the Frontier (FRFAF (<http://studioforcreativeinquiry.org/grants>)). This fund is available to the CMU community “to encourage the creation of innovative artworks by the faculty, students and staff of Carnegie Mellon University. With this fund, the STUDIO seeks to develop a cache of groundbreaking projects created at CMU — works that can be described as “thinking at the edges” of the intersection of disciplines” (FRFAF website (<https://studioforcreativeinquiry.org/frfaf-overview>)).

With excitement, I started to put an application together for a microgrant to create artistic prototypes for a future workshop at CMU Libraries that would help participants explore their relationship to data in an experiential, creative space. In my application narrative, I highlighted how the workshop would support creative data education at CMU:

At CMU, we are in an environment where all domains have rich data sources, from fine arts to robotics. Yet, in my educational initiatives through CMU Libraries, I continue to encounter the idea that “data” is something that lives in a spreadsheet or an algorithm, and primarily in a STEM setting. With this new workshop, I will take an anti-disciplinary approach to promote enthusiasm for data, helping participants see all data around us, within photographs, film, our words, our music, etc. This project “thinks at the edges of the intersection of disciplines” by creating a space where blending domain and specialty areas as they apply to creative data education is welcomed and encouraged.

While I’m definitely not a professional artist, I do have a fair bit of experience in creating mixed-media art and I get a lot of joy from the process, so in my application I designed three prototypes for art which would explore and encapsulate my own relationship with data, and these prototypes would be on display during the workshop to help inspire participants as they create their own art.

Fall 2020 was rough for many reasons, including the stress of the pandemic, but a bright moment of the semester was learning I had been awarded this grant! Using the funds from this grant, I purchased art supplies from BLICK Art Materials (<https://www.dickblick.com/>) to create these mixed-media prototypes, including clay, acrylics, collage paper, canvas, copper wire, and other materials to help build the pieces.

For the prototypes, I focused on three major “data phases” that I’ve had in my life: conducting research on perceptions of [invasive] lake trout in Yellowstone Lake, small business owners naming their businesses after the Grateful Dead, and studying the fandom surrounding Doctor Who. The three pieces I created are shown below with image descriptions:

“Gillnets and Cutthroats”

For two seasons, I worked at Yellowstone National Park on a gillnetting project to remove invasive lake trout from Yellowstone Lake (<https://www.nps.gov/yell/learn/nature/lake-trout.htm>) to protect the cutthroat trout population. I have extremely complicated feelings about the term “invasive”, and I explored these feelings in research I conducted where I interviewed several people who had grown up fishing for cutthroat trout in the park, and how the presence of these lake trout impacted their view of the park. In this case, the fish themselves became a data source as I began to study their histories, their movements, their actions, and their motivations. The pieces represent this journey of viewing the fish as data, and the complicated interactions between these species in this ecosystem.



Image description: two square pieces of canvas encompass this art piece. Each piece of canvas has wooden fish painted to look like cutthroat trout, which includes reddish areas along their throat and underside. The top piece of canvas shows these cutthroat trout in front of a speckled blue and white background, with pieces of copper wire intertwined across the fish. The bottom piece of canvas shows darker versions of these fish on top of a collage paper background merging several patterns and colors of paper including red and green stripes, blue dots, and golden dots on a purple background.

“Grateful Circles”

In my Masters thesis (https://drive.google.com/file/d/1Wi8Vine_BuWJMO4oDP1YIR78STSLHjwb/view) I explored the presence of small businesses in the United States named after a reference to the Grateful Dead (https://en.wikipedia.org/wiki/Grateful_Dead), and interviewed several of these business owners to better understand why they chose to memorialize the band in their small business. This art piece signifies those conversations in which business owners each described their unique experiences going to Grateful Dead concerts and building up their fandom, creating stories that were unique in their own right yet they all intersected through an idea of honoring the role the band played in their lives. I represented this through merging several layers of clay to create a blending of colors and shapes that encapsulate these stories of the Grateful Dead’s impact on the lives of these small business owners.



Image description: dozens of varying sizes of clay circles are intertwined and arranged into a pattern on top of beige burlap fabric in a wooden tray. Each circle contains at least 5 compressed layers of clay of different colors, creating a unique pattern of colors in each circle. The colors include yellow, blue, white, pink, purple, red, green, brown, and black.

“Time Rifts”

My most recent work (https://en.wikipedia.org/wiki/Grateful_Dead) involves *Doctor Who* and exploring how the show can impact how viewers perceive real-world landscapes, people, and events. In this collage piece, I wanted to combine several elements of the show which explore the impact of time on the human (and non-human) experience, as this mirrors how I collect data from the show for my own research. I often explore how elements of time and time travel are used in the show to portray real-world historical events or figures, and how time and space intersect in the show to highlight real landscapes on Earth. In *Doctor Who*, time is not linear but rather is more of a jumbled mess of goo, and as such, the concept of time is an extremely significant, and delicate, part of the *Doctor Who* universe. In this piece, I used wire, collage paper, acrylics, tea bags, and wooden and metal shapes to represent themes of time in the show, and more broadly speak upon how time is such an important element of the data I collect from the show.



Image description: a large square canvas is painted in a speckled design of purple, blue, black, and white to mirror how the show *Doctor Who* portrays the colors of outer space. On top of this background are several collage pieces to represent elements of the show, including blue and black paper designed to look like the TARDIS (<https://en.wikipedia.org/wiki/TARDIS>), patterns of wooden stars and metal gears to represent how the show often symbolizes time travel, several layers of paper which feature the repeating phrase "Once upon a time", and many layers of tea bags to represent a time rift exploding. In the top right corner is a representation of the time rift from the show, created with golden foil paper and wooden teardrop-shaped pieces to represent time ripping apart.

Now that the prototypes are complete, I've started to design and plan the logistics around the workshop where these pieces will serve as inspiration for participants. The workshop will be titled "Data as Experiential Art", and will be a 3-hour experience that will be open to students, staff, faculty, and other CMU community members from all areas of study and specialty to create original art that describes how they view data, their relationship to data, and how it manifests in their work. All participants will be provided with art supplies and a workspace to craft art that engages their view of data, or their ideas for where they'd like to take their data in the future. While workshop participants create their art pieces, workshop facilitators (myself, and likely other CMU Libraries data librarians) will prompt conversations on the data universe that surrounds us, and why and how our relationships with data morph over time. With the prototypes, I want to inspire workshop participants to craft their own creative interpretation of the data in their lives - what is unique about it? What is inspiring about it? What is scary about it? Engaging in such an exercise empowers participants to take agency in their own data journey, leaving them receptive to our educational offerings on more operational data skills, including collection, analysis, and management. At the end of the workshop, participants will share stories of their art pieces and demonstrate what they represent.

While the ability to hold this workshop will depend on safety guidelines around COVID-19 mitigation, my hope is that we can hold the first iteration during Love Data Week 2022 (February 7th - 11th). While this may seem like a long way away, I do hope that you'll mark down this week on your calendar and stay tuned for more announcements on this workshop! Space will be very limited, so be sure to keep a lookout for the registration information later this year so you can see these prototypes in person and create your own data art!