Feral Data Visualization

Data visualization for the feminine, vegetal and embodied

Perspectives in Design module // Cathryn Ploehn // February 2021

Miro board

Goal

The goal of this project is to take students through one method for creating data visualizations sensitive to the situatedness and embodied nature of meaning.

The outcome is a documented process and concept for a data visualization grounded in the biological and cultural place of the designer.

The project assumes no technical background, focusing on concept (not technical manifestation). However, further technical resources for visualizing data will be provided (generative systems, etc.).

The project

Students will choose a dataset (provided by Cat) and design a metaphor to visualize it. In this process, they will define their relationship to the data, attune to the ways one can understand the world behind the data, and explore what biological metaphors (in their ecoregion) could speak to the purpose of the data.

The flow of the project

Class I

- → Situate. Students situate their project in their place as designer: culture, identity, background, etc.
- → Purpose. Students choose a dataset (provided by Cat). They'll read and explore the purpose and genesis of the dataset.
- → Attunement. Students will develop a flow of feelings that might let us experience the data. A "journey map of feelings." This will be just a sketch.
- → Relationship. Students define their relationship to that dataset, articulating the power dynamics that might emerge as they visualize it. Students also read/connect to the bioregion they're working within (Cat will provide <u>resources</u>).

Class II

→ Manifest. Students explore a palette of bioregion metaphors and motifs (resources <u>provided</u> by Cat), choosing one that maps closely to their flow (from attunement phase). They will draw a concept image and define possible ways to map the data onto the metaphor.

Class III

→ **Presentations.** Students will give very short presentations of their project, with feedback from peers and faculty.

Deliverables

Students will deliver a process blog (that can be polished later into a portfolio case study). Prof. Garmon suggested students create a Medium blog, collected into a publication (with links to blogs shared on Miro). Cat will provide a <u>sample blog</u>.

Schedule

Class 1: Introduction

February 3rd

In class

- 1. Before Cat arrives: students share thoughts about readings (in small groups or facilitated by K&G)? (1hr). Cat provides discussion questions:
 - a. What kinds of data visualizations have you seen in your everyday life? What kind of impact have they had on you?
 - b. Discuss the implications of defining data in different ways: data as a "given" versus data as the phenomena observed by bodies.
 - c. What bird, insect, or plant (that resides in your area) do you have a significant relationship. Why?
- 2. Presentation + Q&A (1hr) Add intro of data viz. Intro to data viz
- 3. Break (10min)
- 4. **Introduction to the project (30min).** Cat can linger behind if there are questions about the project.

Homework

To develop your project, document the steps outlined below on your process blog. Cat will provide a <u>sample blog</u>.

0. Situate

Ground this project in your own place as a designer by answering the following questions:

1. Ponder: What culture, identities, worldviews do you hold as a person (and are willing to share)?

- 2. What place, in terms of human and ecological history are you working from? (Cat will provide <u>resources</u> for those working from Texas).
- 3. Optional: Take a walk outside, documenting 3-5 species within a 15min walk of your house. Focus on trees, birds, and wild growing areas and use the app iNaturalist to assist you in identification.

I. Purpose

Choose a <u>dataset provided</u>, and become acquainted with its purpose by answering the following questions:

- 1. What reality does the data describe?
- 2. What worldview informs the dataset?
- 3. What purpose does/can this data serve?

Note: no data analysis of any kind is required. You just need an awareness of the kind of data supplied, and how it was created. If you want to spend extra time looking into these datasets and/or using your own - please feel free.

II. Attunement

Speculate or research what flow of feelings:

- 1. Lets you into the reality described by the data
- 2. Rings true to its purpose.

You can look at how people make sense of this data already (without data viz), paying specific attention to what physical feelings and metaphors might help.

Draw out this flow of feelings, annotating the interstitial transitions between.

III. Relationship

Name how your own place and practices meet the purposes of the data by answering the following questions, drawing from your answers to the **situate** section above:

- 1. What kind of power dynamic might exist between you and the data?
- 2. How does the meaning of the data change as interpreted by you?
- 3. What kind of relationship should be generated between the data (including its purpose) and the audience through data viz?

Class 2

February 10th

In class

1. Before Cat arrives: students share/crit work with one another in small groups (1hr). Cat provides discussion questions:

Discuss the experience of developing your projects by sharing the following (in small breakout rooms)

- → What bioregion / ecoregion are you designing from? In this ecoregion research, what was one interesting and/or surprising finding?
- → Which dataset did you choose what purpose drives that dataset?
- → What kind of feelings are important for understanding this data?
- → What kind of relationship might be interesting between data visualization (and its world) and the people who view it?
- → What kind of power dynamic might emerge from your usage of the data?
- → As you move forward, what do you want feedback on / validation for in your project?

2. Break (10min)

- Introduction/lecture on the second half of the project (45min)
- 4. Break (10min)
- 5. **Activity + desk visits (45min).** Students get started on the next phase of the project in breakout rooms & Miro, while Cat checks in.

Homework

Continue your project by completing and documenting the following steps.

IV. Manifest

Develop a data visualization concept that brings the data to life, using an ecological metaphor (based on your bioregion). Check out the <u>presentation slides from class 2</u> for a detailed look at this process.

- Brainstorm metaphors from your bioregion that might speak to the purpose/relationship in the data. Choose one that fits the personality of the data the closest. (Cat will provide a <u>palette</u> <u>of metaphors</u>, or you can build your own)
- 2. Map variables in the data to parameters of the biological metaphor.
- 3. Sketch your concept and concisely describe the context and experience of using your data visualization.
- 4. Optional: Draw your concept at meaningful states: what does the metaphor look like when at different ends of the variables?
- 5. Optional: Match meaningful thresholds in the variables in the data to meaningful thresholds in the metaphor.

Class 3

February 17th

In class

- 1. Presentations (1hr)
- 2. Break (10min)
- 3. Presentations (1hr)

After class

Cat will give comments/feedback on each student's work.

Class 4

Feb 24th

In class

Q&A with Cat (1hr)