

Exercise 1 - The Data Journal - Part 2

Data, CDAD-UH 1001Q, Spring 2022

Assigned: January 31, 2022

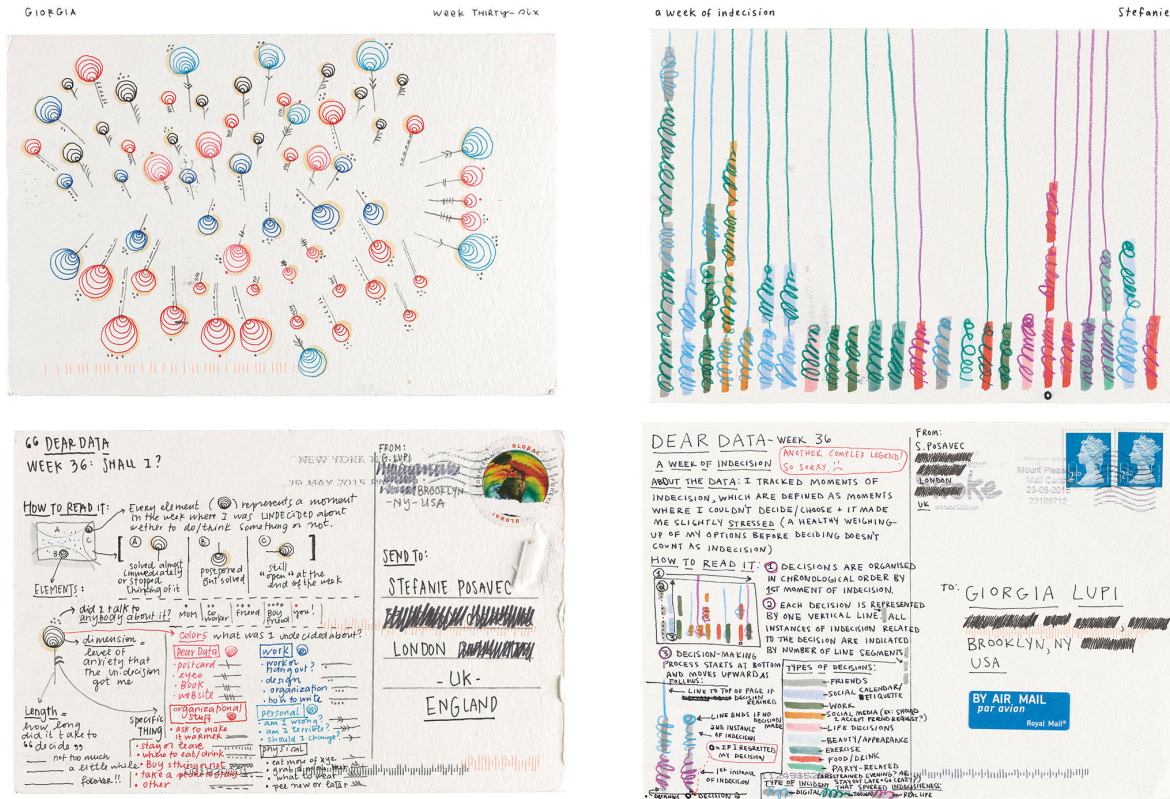
Due: February 7, 2022

Preliminaries

For this part, you will work *individually*.

You can use **any** graphics or charting tool. (e.g Excel Charts).

Or, you can also create the visualization by **hand**. For inspiration, visit the beautiful collection of hand-drawn visualizations at <http://www.dear-data.com/theproject>



Georgia realized that when she was undecided she felt better if she told someone. So she added that data as further information.

Stefanie drew indecision as a twisting, ruminating line. The only decision she regretted this week: her poor selection off the menu while eating at a restaurant.

Figure 1: Dear Data is a year-long data project by Georgia Lupi and Stefanie Posavec. Every week they collect and hand draw their personal data and send it to each other in the form of postcards. The above visualization is about the indecision they face in their daily lives. Aesthetically, these are pretty, but are they effective?

1 Visualizing the “Data” Journal

In this exercise, you will design a visualization to clearly communicate an idea based on your data exposure journal from last week.

You will need to justify your design choices: *Does every pixel in your visualization work towards communicating your idea?*

Turn in: writeup.pdf/.doc/.txt: A short 1-2 page writeup describing your design.

The write-up should contain the following:

1. [2 points] What question are you trying to answer with your visualization? Use this question as the title of your graphic.
2. [2 points] Does the data set provide sufficient detail to answer that question? Did you need to transform it in any way to enable this visualization? Examples of transformation include:
 - Computing percentages, averages or other aggregates
 - Regrouping data stories into new categories
 - Dropping certain features from consideration for the visualization
 - Dropping certain data stories entirely
 - Mathematical transformations such as log transformations¹
 - Augmenting the data set with additional external data.
3. [2 points] How does the visualization communicate your idea? and why is it effective?
 - Document the visual encodings you used and why they are appropriate for the data and your specific question. These decisions include
 - the choice of visualization type
 - choices of size, color, scale and other visual elements
 - sorting or other data transformation.
 - How do these individual design choices enhance the effectiveness of your visualization.

Turn in: vis.pdf/.jpg/.png: A single image visualization.

[4 points] We will judge the visualization on several aspects such as clarity (your visualization should be easy to interpret without having to read the write-up), soundness (correct titles, axis labels, legends if needed, proper annotations, effective color choices), effectiveness (is the intended message evident and is it appropriate for the intended audience), aesthetics and creativity.

An A grade here is reserved for going above and beyond the basic assignment requirements to produce effective graphics. Examples may include outstanding visual design, meaningful incorporation of external data to reveal important trends, demonstrating exceptional creativity, or effective annotations and other narrative devices.

¹When numerical values are at different orders of magnitude (e.g 1 vs. 100,000,000) plotting these values on a linear scale dwarfs out the smaller numbers. A log scale brings them closer: ($\log 1 = 0$, $\log 100,000,000 = 8$). A log transformation is often used in statistical testing as well to make a variable better fit a normal distribution.

Deductions

Here are a few things that can cause point deductions for this assignment:

- Use of misleading, unnecessary, or unmotivated graphic elements.
- Missing chart title, axis labels, or data transformation description.
- Missing or incomplete design rationale in write-up.
- Ineffective encodings for your stated goal (e.g., distracting colors, improper data transformation).

Submission

1. You will package your solution into a folder with the title: 'Ex1-Part2-netID-firstname'. (e.g. Ex1-Part2-aa175-azza is the name of the folder I would submit).
2. This folder will contain exactly **two** files: (a) an image file (.jpg, .png or .pdf), (b) a write-up file (.txt or .doc or .pdf).
3. **Zip this folder** and submit a .zip folder via DropBox at the following link: <http://bit.ly/Data-F22-Ex1-Part2>

We will not grade any submission that does not strictly follow the submission rules.