

Data as Art

The art of data collection, visualization, and sonification

Kelsey Brod, Computational Media, Arts and Cultures PhD Candidate, Duke University, Feb. 8 2024

Reminders

- Hi, I'm Kelsey Brod, Computational Media, Arts and Cultures (CMAC) PhD Candidate here at Duke.
- Project Lead TA
- Reminders: HW1 regrade requests are due by Sunday, project proposals need to be updated from peer review feedback by

Friday at 5pm, and HW2 is due Tuesday at 5pm

- (This lecture material is not a test nor will it be a part of grading... but hopefully it will get you thinking about the "art" of data)

What my job has taught me over the years is that to really understand data and their true potential, sometimes we actually have to forget about them and see through them instead. Because data are just a tool we use to represent reality. They're always just a placeholder for something else, but they are never the real thing.

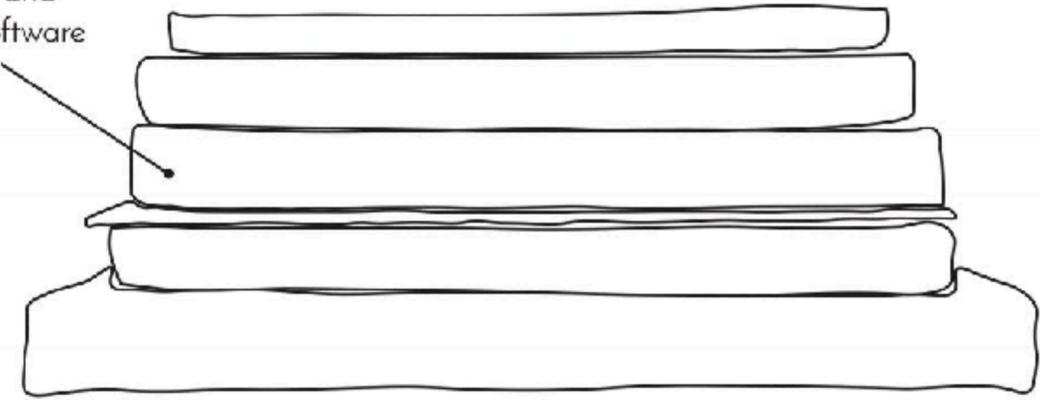
Giorgia Lupi, "How we can find ourselves in data," TED Talk (2017)

Questions for today

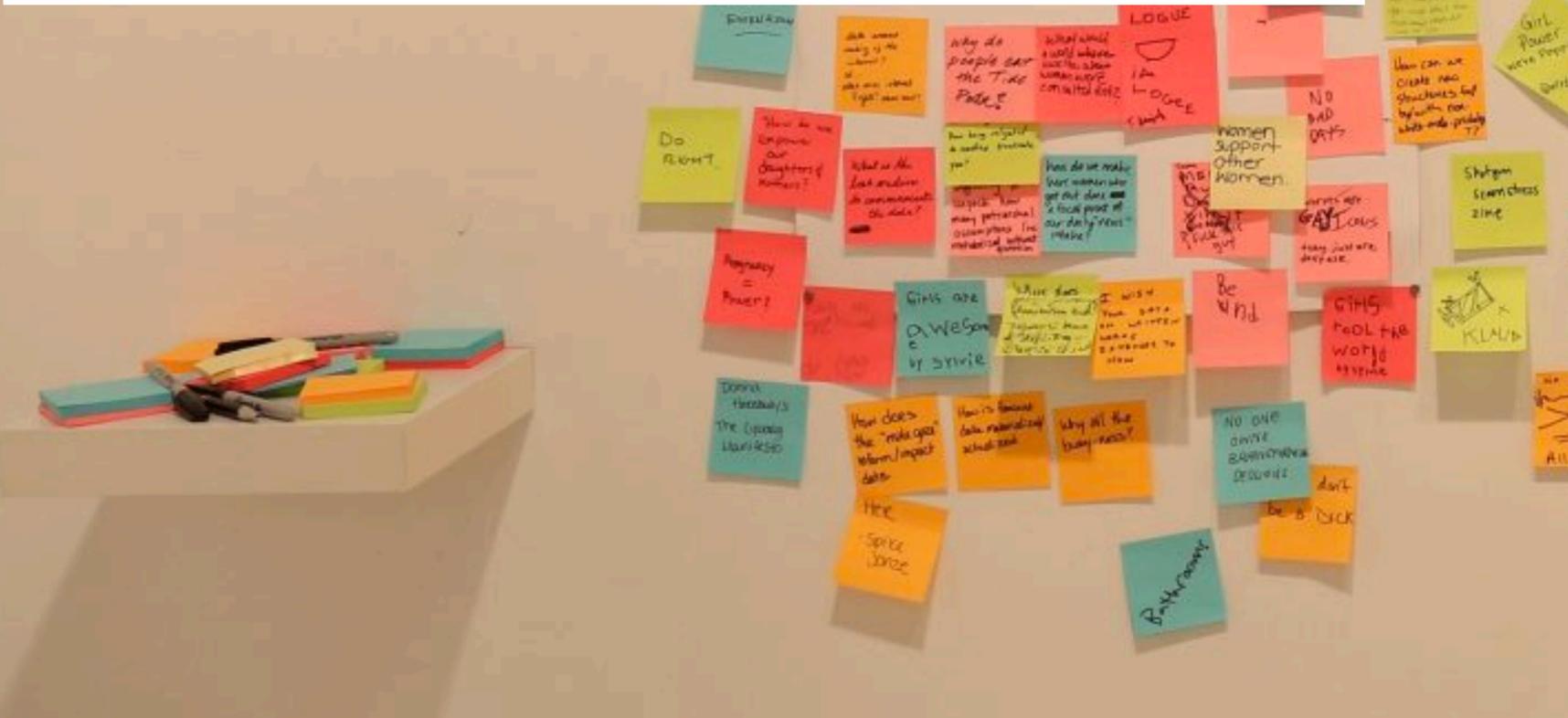
- What is data?
- How is the collection, curation, and presentation of data like an art?
- How can data be used to communicate material, process, and means rather than just an end?

Data is cultural; it can be words, texts, images, sounds, and books.

words, conversations, and poetry are data in software



Caroline Sindere, Feminist Dataset (series of workshops), 2018 -

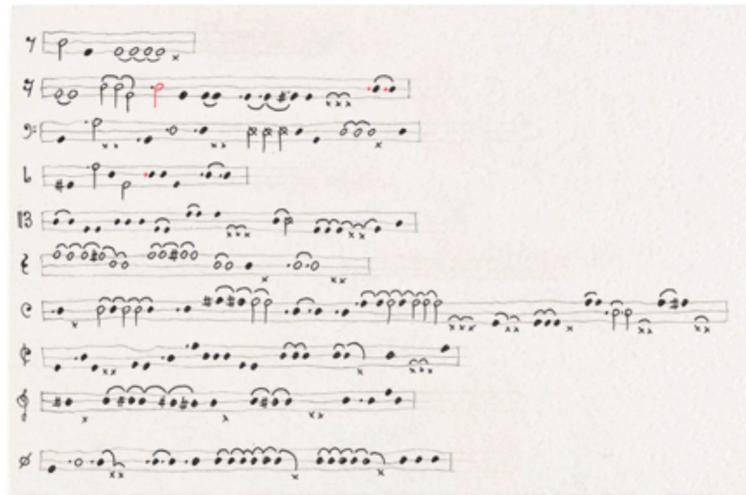


Feminist Data Set is a multi-year project that interrogates every step of the AI process that includes data collection, data labeling, data training, selecting an algorithm to use, the algorithmic model, and then designing how the model is then placed into a chat bot (and what the chatbot looks like) through intersectional feminism as an investigatory framework. Every step exists to question and analyze the pipeline of creating using machine learning—is each step feminist, is it intersectional, does each step have bias and how can that bias be removed? Really, what does it mean to think through every step slowly and thoughtfully; metaphorically, can we think of this as farm to server table, as slow data and consensual data?

Caroline Sindere

Exercise

1. Observe the room or a part of the room. Create at least 2 variables, create a classification system for the observations, and record the observations. (5-10 minutes) **Note: following the sentiment of consensual data, do not classify and record people in the room.**
2. What did you choose?
3. What potential problems did you run into?



“DEAR DATA”
WEEK 07: MUSICAL COMPLAINTS

HOW TO READ IT: Each “code” is a single complaint I said. (i.e. every single “line” is a protest, dissatisfaction or annoyance about a situation or particular thing.) Each “score” represents a “category” of things I complained about, festering complaints in chronological order.

SCORES:

- 4 - **ALL AROUND** (e.g. “I am so...ingly/obnoxious...”)
- 4 - **WE AT HOME** (e.g. “I should’ve done...”)
- 3 - **WORK** (e.g. “this project isn’t going well!”)
- 6 - **TECHNOLOGY** (e.g. “the printer is not working!”)
- 13 - **SERVICE/FOOD** (e.g. “also the waiter is so slow!”)
- 6 - **SOMEONE** (e.g. “he’s really a jerk...”)
- 3 - **COLD** (e.g. “I am freezing! The A.C. is crazy!”)
- 4 - **HOW I FEEL** (e.g. “so tired!” “so bored!”)
- 4 - **BOYFRIEND** (e.g. “you’re ending! you haven’t...”)
- 13 - **OTHER** (e.g. “I spent 1 hour waiting for...”)

POSITIONS OF NOTES:

- 1 - ACTUAL need to complain
- 2 - average “ ”
- 3 - NO REAL “ ”
- 4 - MISSED COMPLAINT: Thought of complaining but didn’t do!

ATTRIBUTES

- to boyfriend
- to friend/family
- to stranger
- 9/4 - in english (all the others were in ITA)
- via text/email (original life)
- adding emphasis
- close on time (same situation)
- to Stefanie @
- about s. thing related to DEAR DATA

FROM: GEORGIA LUPU
100 BROADWAY
JACKSON BROOKLYN
NY - USA

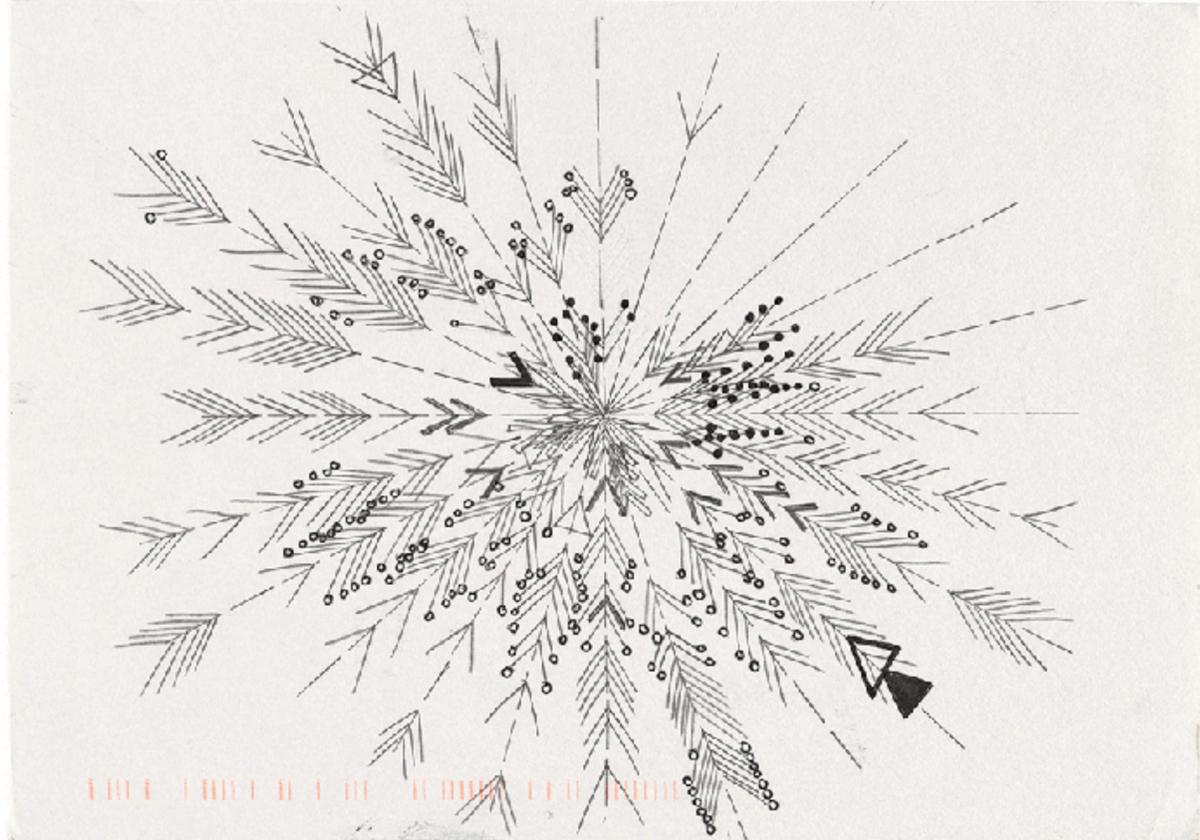
SEND TO: STEFANIE POSAVEC
LONDON SW1P 3BU
- UK -
ENGLAND

DELIVERED BY HAND (SPECIAL NYC DELIVERY!)

What better visual reference than a musical score to show the repetitiveness of Georgia's protests and the "level" of complaint: whether they are justified or totally out of place.



Georgia Lupi and Stefanie Posavec, *Dear Data*, 2015



DEAR DATA
WEEK 01: WHAT'S THE TIME?

HOW TO READ IT:



each symbol represents every moment I glanced at the clocks, grouped by hours of the day.
Different symbols and attributes represent WHY and HOW I checked the time.

SYMBOLS

- o on purpose: wanted to know what the time was.
- just glanced: on a phone, mac or else
- x Because I thought of this project.
- I I thought "don't look!" but I did.
- ! Because I was Bored
- !! Because I was Hungry
- A Heard somebody saying the time aloud.

ATTRIBUTES

- f*ck! I'm late!
- oh, ok. I'm fine.
- analog support (i.e. wrist watch)
- alarm clock rang.
- glanced at the clock while texting or emailing with Stefanie. ☺

SECOND ATTEMPT
NEW YORK NY 300
GEORGIA LUPI
07 OCT 2014



SEND TO:
STEFANIE POSAVEC
LONDON
[UK]
ENGLAND

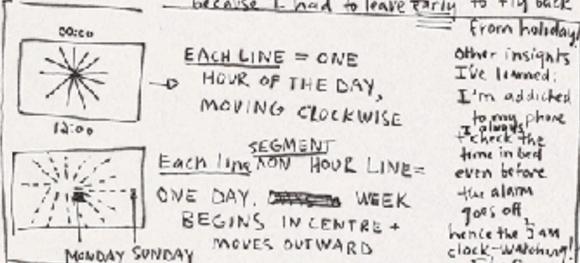
Drawing her first postcard, Georgia had an idea for her whole collection: from now on every time she tracks something related to Stefanie, or to Dear Data, she uses a special pen to represent it!

• pink ink pen!

DEAR DATA: WEEK 01:

A WEEK OF CLOCKS

LEGEND



AN INSTANCE OF CLOCK-WATCHING IS INDICATED BY A SYMBOL:

SYMBOL	TOTAL INSTANCES	CAR	SYMBOL	TOTAL INSTANCES
PHONE	151	MICROWAVE	22	
LAPTOP	84	FRIEND'S OVEN		
TABLET	10	CHURCH CLOCK		
HUSBAND'S PHONE	3			
WATCH	11			

FROM:
S. POSAVEC
LONDON
Royal Mail Jubilee
15-09-2014
54007957

GEORGIA LUPI
BROOKLYN, NY
USA

BY AIR MAIL
par avion
Royal Mail®

This week Georgia and Stefanie tried gathering data in small notebooks (tedious), but soon switched to making notes on their phones (much easier). Stefanie's favourite clock to capture: a bell tolling the time in a town in Devon.

Exercise part 2

1. Think about how you will represent your data. Start to make sketches either in RStudio or by hand. (5-10 minutes)
2. How are you choosing to represent your data and why? What meaning is the aesthetic bringing to the data?

Graphing with metaphors

1. DEEP DIVE

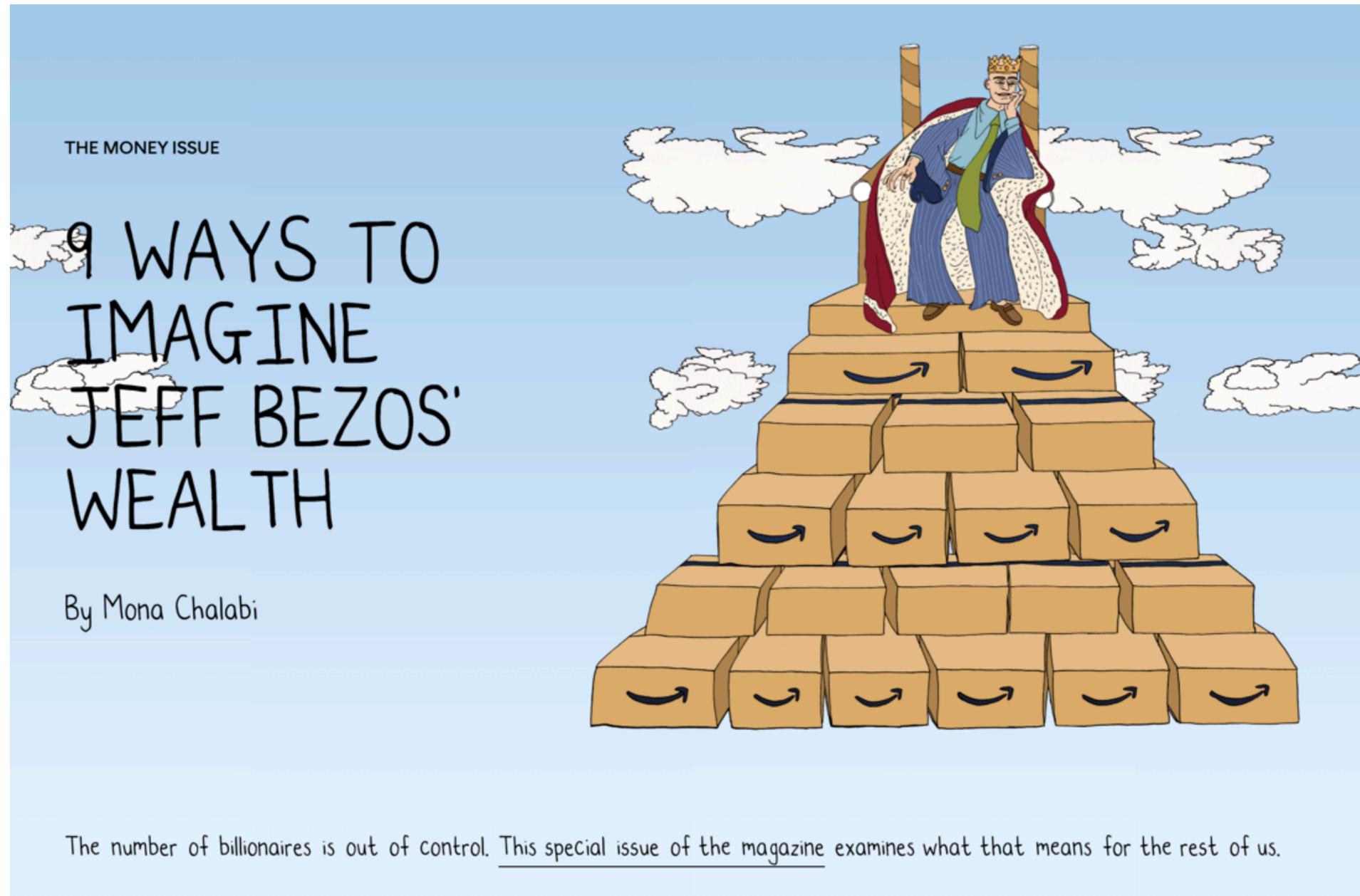
Hard cash is only a tiny fraction of Bezos' enormous wealth.



Cash: \$15.6 billion

Private assets (e.g., Blue Origin): \$9.15 billion

Publicly traded assets (e.g., Amazon stock): \$147.25 billion



Mona Cholabi's Pulitzer Prize winning series, 9 ways to Imagine Jeff Bezos' Wealth, 2023

Exercise part 3

1. Can you visualize your data using a metaphor? (5 min)



Mark Hansen and Ben Rubin, Moveable Type, lobby installation in the NYT building, 2007

Data as world-building

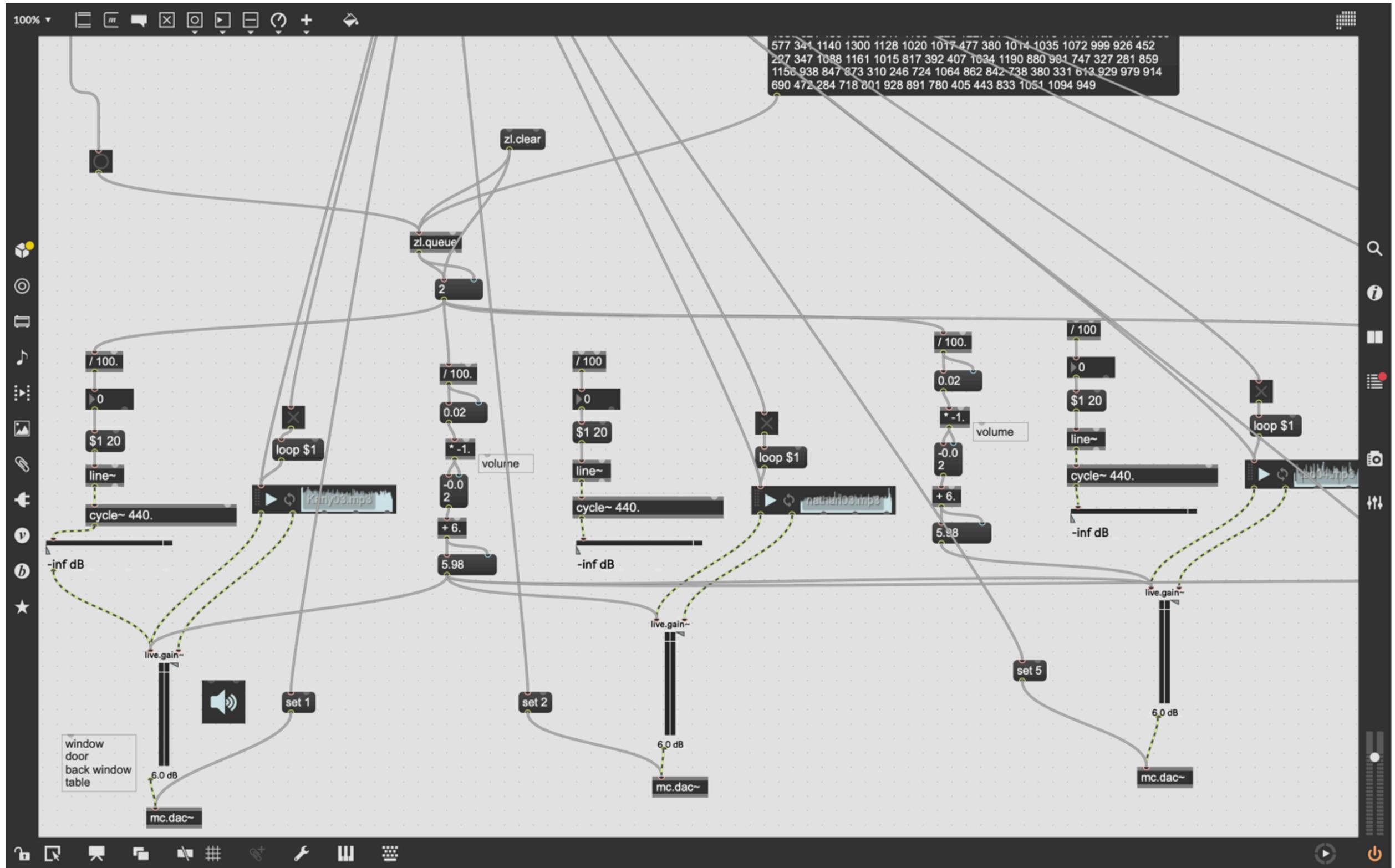


Kelsey Brod, Untitled (reported North Carolina Covid-19 death increases as wind in the trees), Unity open world game, 2021.

Data as sound



Kelsey Brod, Untitled (reported North Carolina Covid-19 death increases as wind in the trees), Unity open



Kelsey Brod, Untitled (four audio channels), 2021 (image of process with software Max)

The Iris
of Garden Beaut

Iris data and classification



be a welcome flower in your garden—
especially if you are seeking plants which