Gayogo̱hó꞉nǫ’ Land Acknowledgement

Cornell University is located on the traditional homelands of the Gayogo̱hó꞉nǫ' (the Cayuga Nation). The Gayogo̱hó꞉nǫ' are members of the Haudenosaunee Confederacy, an alliance of six sovereign Nations with a historic and contemporary presence on this land. The Confederacy precedes the establishment of Cornell University, New York state, and the United States of America. We acknowledge the painful history of Gayogo̱hó꞉nǫ' dispossession and honor the ongoing connection of Gayogo̱hó꞉nǫ' people, past and present, to these lands and waters.

This land acknowledgment has been reviewed and approved by the traditional Gayogo̱hó꞉nǫ' leadership.

Format(-ish) for today

3:30-4:00PM

- **Facilitators**
  - Steve Jackson, Vice Provost for Academic Innovation
  - Rob Vanderlan, Executive Director of the Center for Teaching Innovation
  - Becky Lane, Associate Director of the Center for Teaching Innovation
- **Faculty**
  - Austin Bunn, Performing and Media Arts, Director, Milstein Program in Technology & Humanity
  - Tracy Carrick, John S. Knight Institute for Writing in the Disciplines, Senior Lecturer Director, Writing Workshop & Graduate Writing Service
  - Louis Hyman, Global Labor and Work, Director, Institute for Workplace Studies

4:00-4:15PM

- Self-select a faculty breakout room to share and discuss classroom experiences

4:15-4:30PM

- Shareout ideas/experiences from the breakout rooms

Welcome and general points:

- The challenges/opportunities of Generative AI and teaching are NOT (primarily) a technical problem.
- They will NOT be (fully) resolved by tools, infrastructure or policy.
- Our success (or not) will depend on the creativity and imagination of Cornell teachers, and our ability to learn from each other.

New program! Teaching Innovation Awards: Creative Responses to Generative AI

- This competition seeks to draw out, recognize, and share innovations and experiments from Cornell faculty by documenting creative classroom responses to AI challenges and opportunities.
- Use cases: creative classroom engagements with generative AI; teaching responsible classroom AI literacy; effective design of learning experiences that preclude inappropriate Gen AI use.
- 5K award paid into faculty research or discretionary accounts
- Presentation at spring teaching innovation showcase + work with CTI staff to write up teaching case for sharing/adoption by others
- Applications due: Jan 19; all Cornell faculty (TT and RTE), all disciplines, and all class types/scales welcome
- More details and application portal at: https://teaching.cornell.edu/teaching-innovation-awards-creative-responses-generative-ai

Guidance

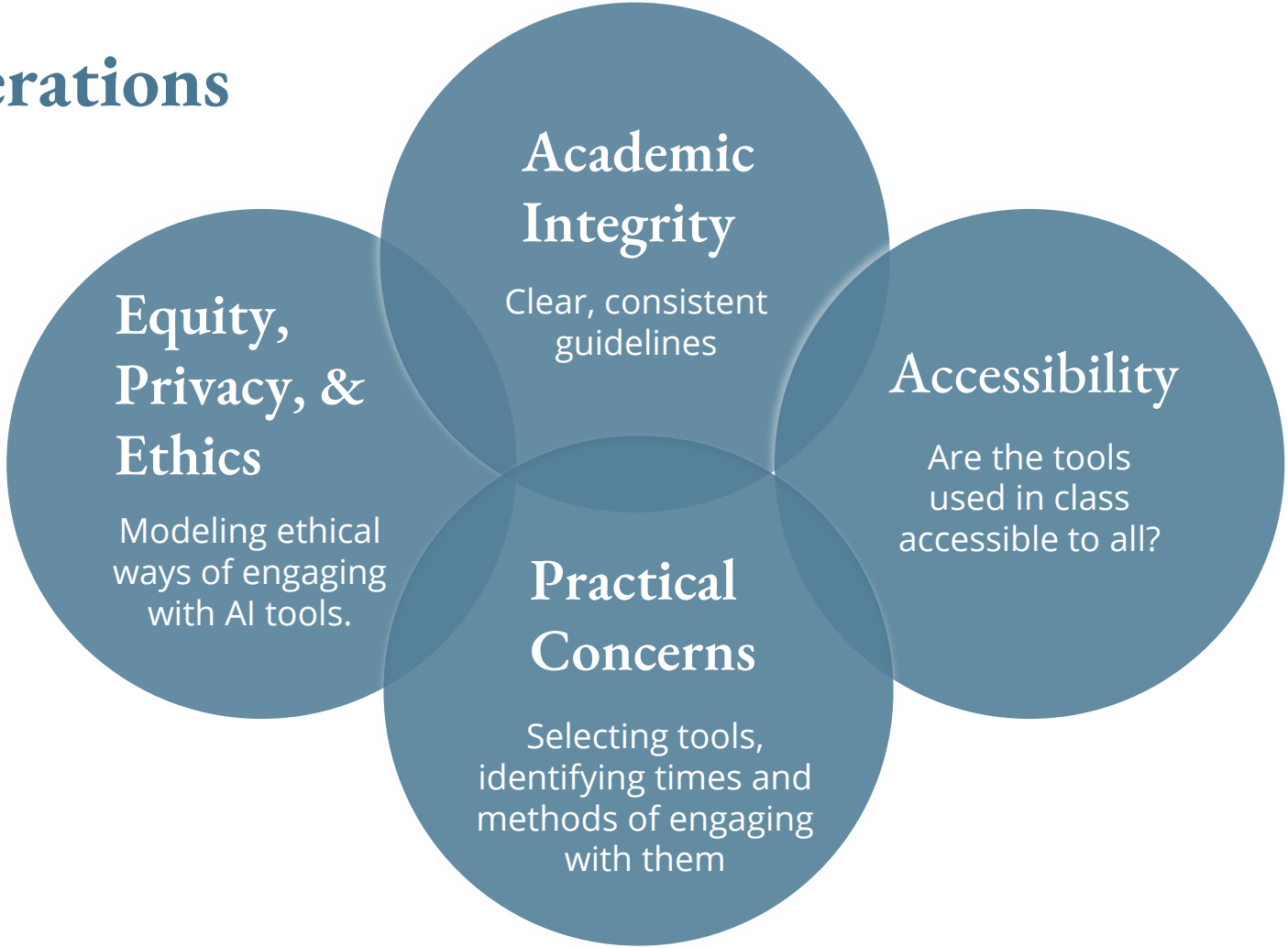
Center for Teaching Innovation | teaching.cornell.edu

Cornell University Report

Providing guidance and suggestions on

- Considerations related to AI
- Avoiding detection tools
- Examples of assignments
  - Encourage
  - Allowing with attribution
  - Prohibiting (steer around)
- Setting your policy for AI use

Considerations



Resources

CU Committee Report

Generative Artificial Intelligence for Education and Pedagogy

CTI website (teaching.cornell.edu)

AI in Assignment Design, Ethical AI, AI & Academic Integrity, AI & Accessibility, Additional resources to measure and assess learning

Faculty drop-in hours

Faculty drop-ins: Mon-Fri 1-3 p.m.

Consultations (cornellcti@cornell.edu)

Online and in-person consultations

Data and History considers both the history of data and the data of history, and deeply relies on ChatGPT

Overview:

In this course, we will explore American labor and business history through data. Students will learn how to think critically about how data are made and organized. They will then use that data to build arguments and visualizations about social and economic change over time. Throughout the course, we will learn to use various tools such as Google Sheets, Python, and Chat GPT for data analysis. No prior experience with statistics or programming is necessary, but students should come with a desire to learn.

Goals:

Students will learn to think carefully about data analysis and, at the same time, how to use contemporary data analysis on historical topics.

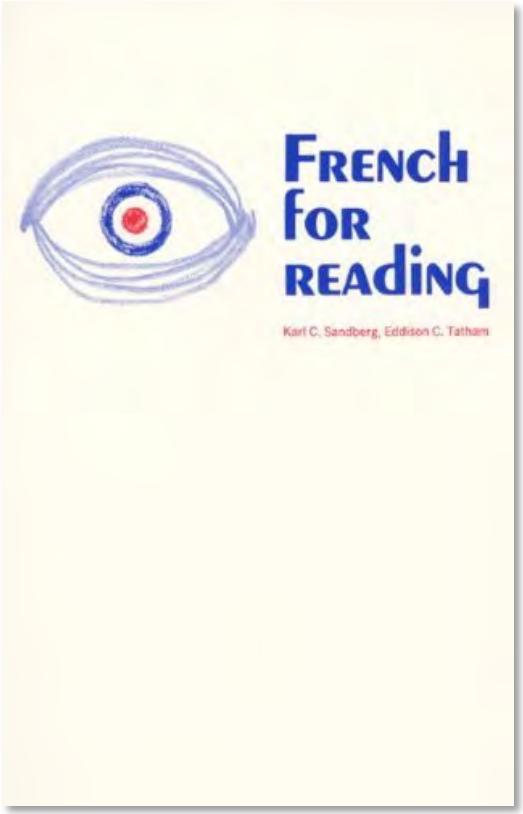
Books:

- Sarah Igo, *The Averaged American*
- Dan Bouk, *Democracy's Data*
- Dan Bouk, Kevin Ackermann, danah boyd, *A Primer on Powerful Numbers*
- Claire Lemercier and Claire Zalc, *Quantitative Methods in the Humanities**
- Lizabeth Cohen, *A Consumer's Republic*
- Cole Nussbaumer Knaffic, *Storytelling With Data: A Data Visualization Guide For Business Professionals*
- Christine Stansell, *City of Women: Sex and Class in New York, 1789-1860*
- Leslie Harris, *In the Shadow of Slavery: African Americans in New York, 1626-1863*
- Robert Weems, *Desegregating the Dollar: African American Consumerism in the Twentieth Century*

*Readings will be available online, except for *Quantitative Methods in the Humanities* which should be purchased or read in the library.

**Readings will be found on Canvas under Course Materials or under Files-->Additional Readings

In the AI age, you need code reading skills more than code writing skills



My class is structured around the same principles as this classic book for getting American historians through their foreign language exams in grad school.

Enough to read, but not enough to write.

Coding is not computer science.
Computer science is a rich discipline that considers information abstractly.

Coding is just talking in a very specific way to a computer.

ChatGPT allows anyone to code, with a little practice.

AI is an incredibly complementary technology for your particular skills

AI + Domain Knowledge

AI doesn't, by itself, do anything. You need to apply it to your "domain knowledge" which is a nice way of saying whatever your unique work problems and frustrations are. Nobody else can tell you what AI can do for you.

AI is an assistant, not SkyNet

AI is a semi-reliable, way too enthusiastic intern who is good at oddly specific tasks related to language.

AI is a low-end tech consultant

AI can write totally standard, run-of-the-mill computer code for totally-normal problems, which are nearly all of your problems.

Image created with AI

ChatGPT is, for instance, extraordinarily good at writing computer code. I am not, but I want the computer to do my work for me.

Situation	Examples
Whenever I encounter something boring and repetitive, I ask Chat. When I encounter something I would like to do, but don't know how, I ask Chat	• Turning thousands of image files in the right orientation • Turning 150 pages of 1950s variable codebook into code • Pulling all of a file type into a folder • OCR 19th century documents • Text summarization • PDF manipulation • Data analysis • Writing complicated Excel formulas • Graphing • Making PowerPoint tables • Writing drafts • Editing drafts • Use Google API • Etc.

The technical skills rely heavily on LinkedIn Learning and ChatGPT

LinkedIn Learning Primers:

We will be using these videos as *primers* instead of readings for the programming and technical sections of the course. They will usually, but not always, be assigned before the material is covered in class so that you can come to class with questions and problems. You can learn at your own speed with these, but your classmates, your TA, and your professor are always here to help out. You can expect, at the beginning of the semester, about 1-2 hours of primers a week.

The primers will provide you the basic – "table stakes" or "commodity" knowledge– that will allow us to have more interesting conversations about data and history. I will go over the important ideas from the primers in class, but you will need to watch the videos and do the exercises to learn to code.

- Learning Excel 2021 https://www.linkedin.com/learning/learning-excel-2021/
- Excel Quick Tips https://www.linkedin.com/learning/excel-quick-tips-22333041
- Google Sheets Pivot Tables https://www.linkedin.com/learning/google-sheets-pivot-tables/
- (Exercise Files are in Files—>Additional Data under Ex_Files_Google_Sheets_Pivot_Tables)
- Python for Non-Programmers) https://www.linkedin.com/learning/python-for-non-programmers/
- Intermediate Python for Non-Programmers https://www.linkedin.com/learning/intermediate-python-for-non-programmers/
- Python for Data Science Essential Training Part 1 https://www.linkedin.com/learning/python-for-data-science-essential-training-part-1/
- Python for Data Science Tips Tricks Techniques https://www.linkedin.com/learning/python-for-data-science-tips-tricks-techniques/
- Python Statistics Essential Training https://www.linkedin.com/learning/python-statistics-essential-training/
- Statistics Foundations https://www.linkedin.com/learning/statistics-foundations-1-the-basics/

Students struggled with both the pace of the class and what Chat meant for "their work." They were not used to being self-motivated in learning.

Expectations:

ChatGPT: ChatGPT is very much a new technology. The math we will be learning is decades old. The history we will be reading is years old. I can be fairly confident that nothing will change in those from the beginning to the end of the semester. I cannot have that confidence in AI. We will need to be adaptive if things change.

Play: You are creative, brilliant people. This class will definitely set the context for the use of technology to answer historical questions, and nearly always I will show you how to do stuff, but I also expect you to play. By play I mean that you are not running down a checklist while staring at a clock imagining doing something else. You are present. You are curious. You fool around with the possibilities and sometimes break things. You are confused, but you push through it. You solve minor problems on your own, often by Googling. YouTube is not cheating. You are excited to share the results of what you find. You have fun.

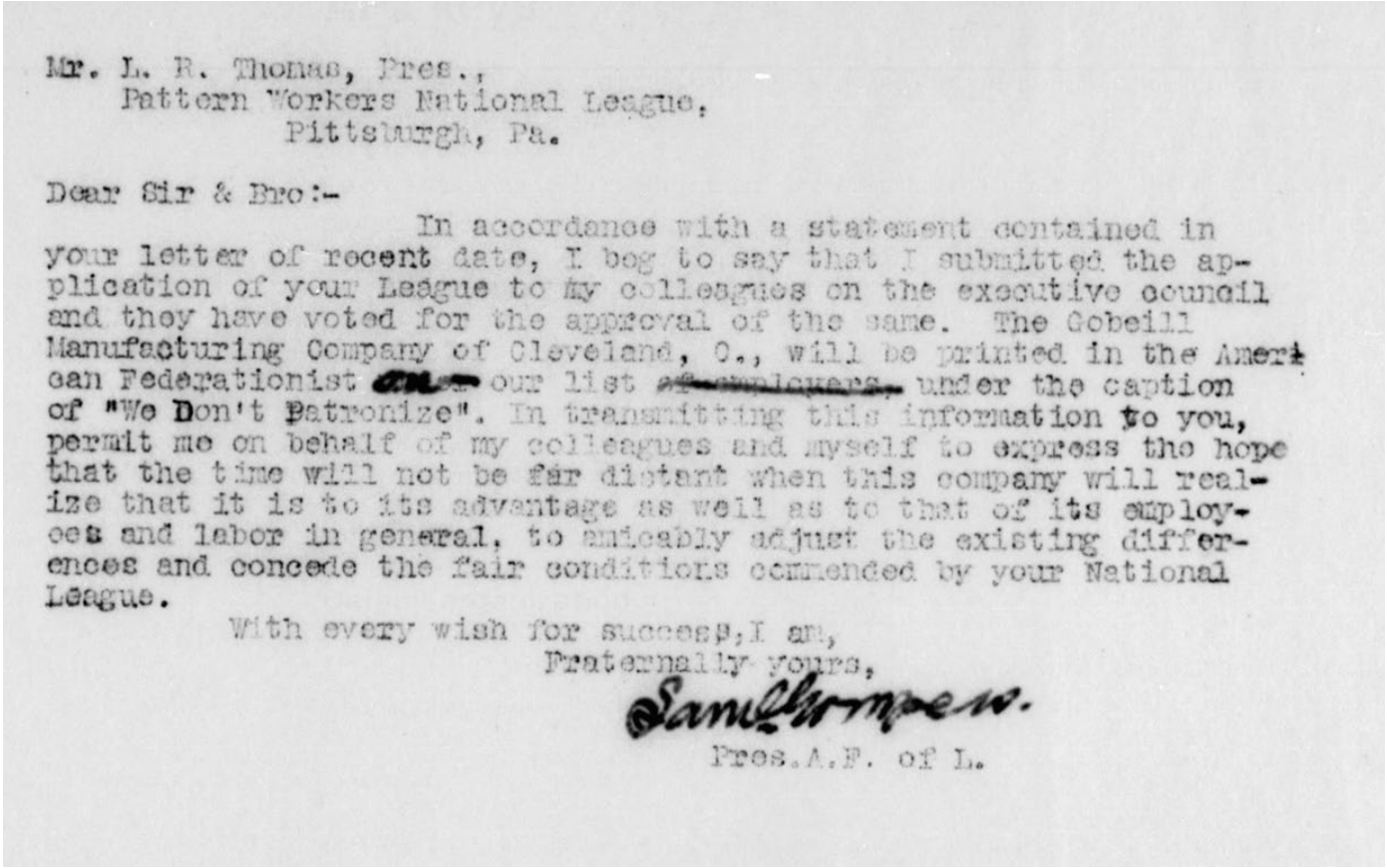
Computer Science: Just as you don't need to be a linguist to write, you don't need to be a computer scientist to code. The goal of this class is not to teach you how to ask new questions about computer science but how to ask new questions about history using computers.

Humility: As we learn about data and data analysis, we will do so with humility. We will be suspicious of claims to complete truth. We will be dubious about our own findings and try to think up ways of proving ourselves wrong, with both quantitative and qualitative methods.

To accomplish the tasks, students needed to lean heavily on Chat to do the coding work, so they could focus on high-level questions.
This was confusing for some of them.

The value of humans in the age of AI is asking human questions, and using machines to get answers.
They were more accustomed to memorizing the answer than asking the question.

Students learned data science math, but also historical techniques like OCR



Mr. L. R. Thomas, Pres.,
Pattern Workers National League,
Pittsburgh, Pa.

Dear Sir & Bro:-

In accordance with a statement contained in your letter of recent date, I beg to say that I submitted the application of your League to my colleagues on the executive council and they have voted for the approval of the same. The Gobeill Manufacturing Company of Cleveland, O., will be printed in the American Federationist [redacted] our list [redacted] under the caption of "We Don't Patronize". In transmitting this information to you, permit me on behalf of my colleagues and myself to express the hope that the time will not be far distant when this company will realize that it is to its advantage as well as to that of its employees and labor in general, to amicably adjust the existing differences and concede the fair conditions commended by your National League.

With every wish for success, I am,
Fraternally yours,
Sam Gompers.
Pres. A.F. of L.

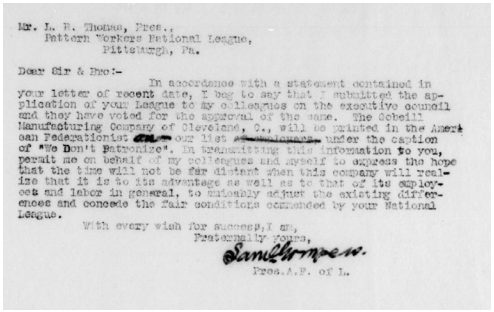
ChatGPT writes code to use the Google and ChatGPT APIs to OCR and clean the text

API Process

Used Google Vision API

Used ChatGPT API gpt-3.5-turbo

Image source: Easy Diffusion “create a picture that looks like a lithograph with a medieval christian monk and a computer. the setting is a scriptorium.”



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With every wish for succesp, I am,
Fraternally yours,
Sanelompe w.
Pros.A.P. of L.

Mr. L. R. Thomas, President,

Pattern Workers National League,

Pittsburgh, PA

Dear Sir & Bro:

In accordance with a statement contained in your letter of recent date, I beg to say that I submitted the application of your League to my colleagues on the executive council and they have voted for the approval of the same. The Cobeill Manufacturing Company of Cleveland, OH, will be printed in the American Federationist under the caption "We Don't Patronize". In transmitting this information to you, permit me on behalf of my colleagues and myself to express the hope that the time will not be far distant when this company will realize that it is to its advantage as well as to that of its employees and labor in general, to amicably adjust the existing differences and concede the fair conditions commended by your National League.

Sincerely,

W. Sanelompe

President, A.P. of L.

RAW

CLEAN

OCR

33
Mr. L. R. Thonas, Pres.,
Pattern Workers National League,
Pittsburgh, Pa.
July 31,
With every wish for succesp, I am,
Fraternally yours,
Dear Sir & Bro:-
In accordance with a statement contained in
your letter of recent date, I bog to say that I submitted the ap-
plication of your League to my colleagues on the executive council
and they have voted for the approval of the same. The Cobeill
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oes and labor in general, to nicably adjust the existing differ-
ences and concede the fair conditions commended by your National
League.
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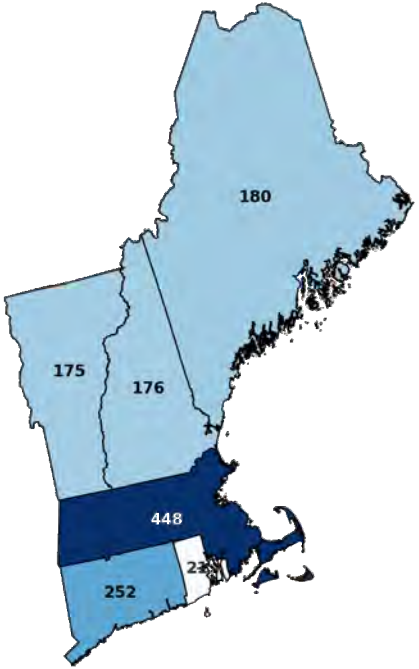
Sanelompe w.
Pros. A.P. of L.

The OCR was gibberish.
After the LLM, the results were nearly perfect.

Students also learned to do visualizations, like plotting and mapping with Python.

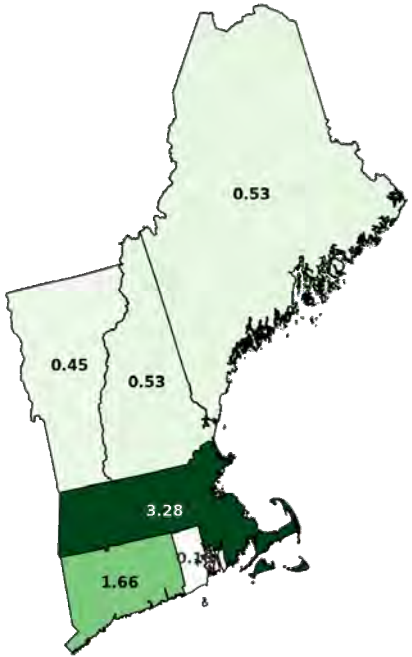
Congregational churches in New England (1850)

#



Value of Congregational property in New England (1850)

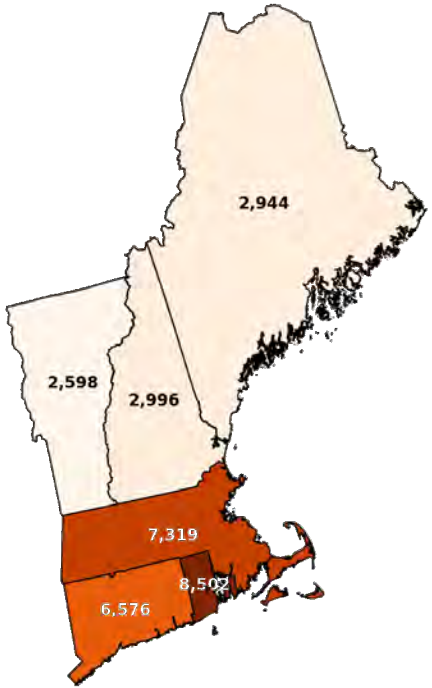
$millions



Mapping in this way is as powerful as GIS

Value per Congregationalist Church in New England (1850)

$ per church



Revision is still necessary!

can you create a new map that visualizes the value per church?

change unit values back to nominal

revise. put in commas where needed in the numbers. make CT and RI font = white

The assignments started with basic spreadsheet skills and progressed all the way to complicated data analysis.

Assignment 4: Poverty or Progress?
An essential part of the story of American history is the immigrant who comes from overseas and, despite adversity, succeeds. This rags-to-riches narrative is powerful in our culture. In the Anbinder reading, you saw some very persuasive evidence that for Irish servants, it was in fact the case—at least they were able to save some substantial sums. Yet, we have also read stories of labor exploitation, from indentured servants to sweatshop workers.

This project will give you the opportunity to complicate some aspect of the Anbinder argument using his own data.
In this project, you will come up with your own question and use the data to answer it.
When using data, it is important to have a hypothesis about what you think is the case (e.g, women from different counties in Ireland may have had different saving rates), so that you don't end up spinning your wheels as you analyze the data.

You may also flesh out your argument with individual lives. If so, I would suggest combining the Anbinder data with https://www.ancestrylibrary.com/ (which you should access through the Cornell library at https://newcatalog.library.cornell.edu/catalog/5508453)

Feel free to use statistics, graphs, visualizations, maps, or any other kind of analysis. Draw on data analysis techniques from this and your other classes.

The important part is moving from analysis to argument. No data is self-evident. It must be turned into a narrative that answers the question.

The deliverable from this project is open-ended, but it will need to make an argument about the past. You may write a short analytic paper. You may make a historical map with annotation. You may make a powerpoint presentation. You may be imaginative.

While I have posted some of the Anbinder data set on the Canvas site, you can find more aspects on his curated data site.
http://beyondragstoriches.org/home-exhibit

Students need to provide conventional writing as well as working code.

The data, as shown in the graph, suggests that before the famine, Irish immigrant women had an average savings of roughly $487.81. This figure decreased to $263.84 during the famine and recovered slightly to $313.15 after the famine. On the other hand, German immigrant women, serving as a control group, experienced a similar trend but with higher initial savings.

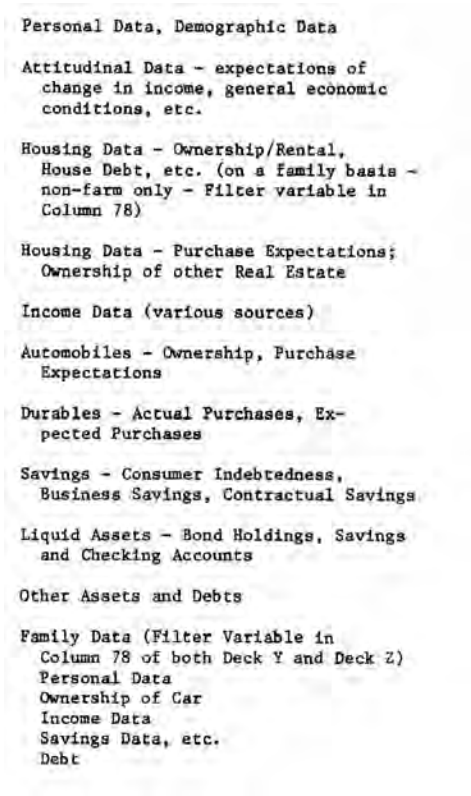
Anbinder's analysis and the Emigrant Savings Bank records underscore that the bank's clientele closely mirrored New York's Irish immigrant community. Despite past beliefs, many of these immigrants had a considerable amount of savings. Factors such as occupation influenced saving potential, with professionals saving the most and artisans, unskilled workers, and laborers experiencing variable savings. Female depositors, while often earning less than men, had notable savings, with domestic servants benefiting from minimal financial obligations.

```
import pandas as pd
import matplotlib.pyplot as plt
from matplotlib.ticker import FuncFormatter

# Load the data once
file_path = '/Users/20sduff/Desktop/Anbinder, O Grada, Wegge Abridged Depositor
Database.xlsb'  # Update the path to your file accordingly
df = pd.read_excel(file_path, engine='pyxlsb')  # Make sure the engine is correct
for .xlsb files


# Graph 1

# Load the data
df = pd.read_excel(file_path)  # Update the path to your file accordingly

# Filter for only 'id' and 'gs' codes in 'Birth Nation ' and create a copy to avoid
SettingWithCopyWarning
df_filtered = df[df['Birth Nation '].isin(['id', 'gs'])].copy()

# Create a new column 'Birth Nation Cleaned' and map 'id' to 'Irish Women' and 'gs'
to 'German Women'
df_filtered['Birth Nation Cleaned'] = df_filtered['Birth Nation '].replace({'id':
'Irish Women', 'gs': 'German Women'})

# Clean and prepare the data
# Convert 'Highest Amount on Deposit in All Household Accounts on Any One Day' to
numeric, coerce errors
df_filtered['Highest Deposit Cleaned'] = pd.to_numeric(df_filtered['Highest Amount
on Deposit in All Household Accounts on Any One Day'], errors='coerce')
# Extract the year from 'Ship Manifest Arrival Date', coerce errors
```

For the later assignments, students turn in a normal history paper, complete with visualizations, as well as the python code that generates the key analyses.

Categories	A	B	C
Original Analysis (25%)	• Originality in formulating research question and hypothesis. • Demonstrates deep understanding of the Anbinder argument and offers a nuanced critique.	• Research question and hypothesis is perhaps obvious but still of merit. • Critique of Anbinder argument is present but lacks some depth.	• Unclear why this argument would be interesting. • Little to no critique of Anbinder argument.
Historiography (20%)	• Excellent integration of other scholarly works, including readings from class. Builds on or contradicts existing historical narratives effectively.	• Good use of other scholarly works but may lack in tying these effectively into the research question or hypothesis.	• Minimal or poor use of other scholarly works. Does not effectively use these to bolster or challenge the research question or hypothesis.
Data Science (20%)	• Exceptional use of data analysis techniques. Code is well-organized and commented. • Code runs from original files. • Statistical techniques are used appropriately. • Data sets are linked in ways to advance new arguments.	• Good use of data analysis techniques. Code is mostly organized and somewhat commented. • Code runs only after tinkering. • Statistical techniques are used, but with some errors or inappropriately. • Data sets are used independently.	• Minimal or poor use of data analysis techniques. Code is disorganized or lacks comments. • Code does not run. • Statistical techniques are absent, largely incorrect, or misinterpreted. • Only one data set is examined.
Writing (20%)	• Excellent organization and clarity. Thesis is clear and the paper is free of grammatical errors. • Consistently argumentative topic sentences. • Correct use of Chicago/Turabian style citation format.	• Decent organization and clarity but may contain some minor grammatical errors. • Argument unclear at times. • Any other citation format except Chicago/Turabian.	• Poor organization and/or multiple grammatical errors. • Unclear argument. Tends towards a “data damp” than making sense of the evidence. • No consistent citation format.
Visualization (15%)	• Exceptional use of visualizations that significantly aid in understanding the analysis. High-quality, clearly labeled, and well-integrated into the narrative. • All visualizations follow standard format. Visualizations clearly considered in a way to advance arguments.	• Good use of visualizations but may lack in quality or integration into the narrative. • Visualizations somewhat deviate from standard format. • Some visualizations are there, but no the ones that would make the most impact.	• Minimal or poor use of visualizations. Low-quality or not well-integrated into the narrative. • Visualizations look unconsidered and default. • Visualizations exist but are unrelated to analysis.

By the end of the semester, they are analyzing real, dirty data sets. The Survey of Consumer Finance of 1950 offers a window into the financial lives of Americans in the past



Personal Data, Demographic Data

Attitudinal Data - expectations of change in income, general economic conditions, etc.

Housing Data - Ownership/Rental, House Debt, etc. (on a family basis - non-farm only - Filter variable in Column 78)

Housing Data - Purchase Expectations; Ownership of other Real Estate

Income Data (various sources)

Automobiles - Ownership, Purchase Expectations

Durables - Actual Purchases, Expected Purchases

Savings - Consumer Indebtedness, Business Savings, Contractual Savings

Liquid Assets - Bond Holdings, Savings and Checking Accounts

Other Assets and Debts

Family Data (Filter Variable in Column 78 of both Deck Y and Deck Z)
Personal Data
Ownership of Car
Income Data
Savings Data, etc.
Debt

By the use of this data we can ask important questions about the past.

And we can do analyses that the Surveyors in the 1950s did not (like examine the different financial experiences of black and white Americans.)

The data is a codebook and an ASCII file structured like a punchcard in columns and rows.

```
5910001120061601003111002010006001111990050003 1&0000000000000000        4201  41
5920001113300300004121640000400003535439 1                                      41
5930001200082300000000000000000000000000000000000000000000000000004100005     300    141
5940001440000000000000000000000  000                                            41
5950001000000000000031500600004801132290000005006005000000200811000 5          41
5960001000000000000000000000000000000000000000000000000000000000000041000000    41
5970001000000000000000000005000000006009000000000255550000000000041000000    41
5980001050000000005000000500000005000000050000000000000000000505050500    41
5990001555500000000000000000000000000000000000000000000002100000000             41
59Y0001600100996001000000025006015000009000005006051500002000600500000401155514 1
59Z0001900-&00000                                                               141
```

This column for instance marks which “card” is being referred in the row.

This 4 digit code is for place (in this case, Adair, MO)

These columns are the weight for that card

Assignment 5: Survey of Consumer Finance, 1950

The Survey of Consumer Finance contains all the opportunities for insight and myopia that Bouk and Igo write about.

What questions will you ask? What arguments will you make? How will you place it in historical context?

Here is the link to the website for the original data. https://www.icpsr.umich.edu/web/ICPSR/studies/3612

This assignment is very unstructured and will require a lot of work. The files have two parts: a codebook in PDF form and a very large ASCII file that replicates the original punchcards. You will need to find a way to "read" in the data from the ASCII file so that you can analyze it. You will need to ask good questions that were perhaps not asked in 1950. Data will need to be cleaned. So many problems to solve! So real!

For this assignment, the deliverable will be two papers. First, you will write a conventional historical paper of 3000 words (10-15 pages) making an argument about consumer finance in 1950. You will need to include visualizations. Second, you will write a technical paper of 1000 words (3-5 pages) that describes what you did and defends your technical analysis. In a separate file, you will need to include all the raw data and python code for your analysis (including that generated by ChatGPT). The TA/Professor should be able to run the code to generate all key analyses and graphs starting with the raw data, including clean up code.

FILES TO GET YOU STARTED

Codebook SCF 1950 Final Version.xlsxDownload Codebook SCF 1950 Final Version.xlsx
codebook_small.txtDownload codebook_small.txt
03612-0001-Codebook-card_image.pdf
03612-0001-Data-card_image.txtDownload 03612-0001-Data-card_image.txt
Grading Rubric .pdf

Students figure out how to read the data, label the variables, analyze the variables and make novel arguments.

```
import pandas as pd

# Function to load codebook information
def load_codebook_info(excel_file, card_sheet_name):
    card_data = pd.read_excel(excel_file, sheet_name=card_sheet_name)
    header_row_index = card_data[card_data.iloc[:, 0] == 'Variable
Number'].index[0]
    card_info = card_data.iloc[header_row_index:].copy()
    card_info.columns = card_info.iloc[0]  # Set the correct header
    card_info = card_info[1:]  # Remove the old header row
    card_info.reset_index(drop=True, inplace=True)  # Reset the index
    return card_info

# Function to extract and process data from a specified card
def extract_card_data(excel_file_path, card_sheet_name, ascii_file_path,
variable_numbers):
    card_info = load_codebook_info(excel_file_path, card_sheet_name)
    combined_data = pd.DataFrame()

    for var_num in variable_numbers:
        var_info = card_info[card_info['Variable Number'] == var_num]
        col_start = int(var_info['Column Start'].values[0]) - 1
        col_end = int(var_info['Column End'].values[0])
        var_name = var_info['Variable Name'].values[0]

        var_data = pd.read_fwf(ascii_file_path, colspecs=[(col_start, col_end)],
header=None)
        var_data.columns = [var_name]
```

```
import pandas as pd

# Set pandas display options to show more columns and width.
pd.set_option('display.max_columns', None)
pd.set_option('display.width', 1000)

def extract_data_from_cards(punch_card_data_path):
    """
    Reads the punch card data, extracts data from cards 1, 3, 4, 5, and Y,
    and returns a pandas DataFrame containing these values.

    :param punch_card_data_path: Path to the text file containing the punch card
data.
    :return: A pandas DataFrame with columns for the specified variables from all
cards.
    """
    # Mappings for all variables
    mappings = {
        'place_code': {
            '1': 'urban central city', '2': 'suburban', '3': 'rural county', '4':
'city over 50k',
            '5': 'city 2500-50k south', '6': 'city 2500-50k non-south', '7': 'town
under 2500 south',
            '8': 'town under 2500 non-south', '9': 'open country south', '0': 'open
country non-south'
        },
        'wwii_veteran_status': {
            '1': 'head is only veteran', '2': 'one veteran not head', '3': 'two or
more veterans including head',
            '4': 'two or more veterans not including head', '0': 'no veterans',
'x': 'not ascertained'
```

We began formulating our hypothesis about the data. Overall, we hope to understand how the rise of credit impacted American wealth – did it increase wealth, or are Americans simply going into debt because of rising spending? According to the *A Consumers Republic* reading, the rate at which families were going into debt was rising faster than their income. In particular, we will examine subsets of the data set to see how they responded differently to this period of rising spending. For instance, did White or Black Americans have higher rates of spending, and which

Main Question:
Do veterans and non-veterans have significantly different levels of unemployment, housing status, and housing expectations?

Alternative Questions & Subquestions:
Comparison of Post-War Migration Tendencies: How many people are migrating towards rural spaces vs urban spaces, and is there a significant difference in that comparison between veterans and non veterans?
Note: This could be interesting to analyze as a subquestion to our current main question, as financial security and housing prospects could influence these patterns.

Comparison of Veteran vs Non-Veteran Automobile Ownership: How many people owned cars? Does the proportion change when looking at rural and urban areas? Can we determine if buying a car was a necessity or a luxury for different types of people? Do these answers change based on veteran status?
Note: We should make note to account for the fact that rural buyers will have it as a necessity, as opposed to urban / suburban as more of a luxury. We can also check 'availability' of cars by percentage of those bought used vs new.
Note: By analyzing this question with a focus on veteran status, we can also ask this as a subquestion to our main question, as home ownership and vehicle ownership should tend to follow similar trends.

D&H was as rewarding to teach as it was challenging

Successes

- Students are fluently using APIs, libraries, and code to connect quantitative evidence and historical argument.
- Students ask and answer statistical questions on their own, and decide on the appropriate tests.
- Students developed critical thinking skills related to data sets.

Challenges

- Students are not accustomed to creating their own questions and sometimes struggled to do so.
- Some students lacked basic computer literacy (e.g., that files should be organized in folders).
- Students seemed surprised that they needed to know something from the previous month.
- Students seemed to lack “intuition” about mathematics

Failures

- Group work is necessary, but, as always, there are free-riders
- Some students wanted more “history of data” than “data of history.” It was challenging to teach to students with varied backgrounds in math, CS, and history.

Laurie Anderson

Masterclass:
Creative Collaborations with AI

RUNWAY ML
image trained AI portrait

Laurie Anderson

Masterclass: Creative Collaborations with AI

MIDJOURNEY
prompt: an eerie, beautiful photorealistic picture of performer Laurie Anderson at night in a field of flowers

Laurie Anderson

Masterclass: Creative Collaborations with AI

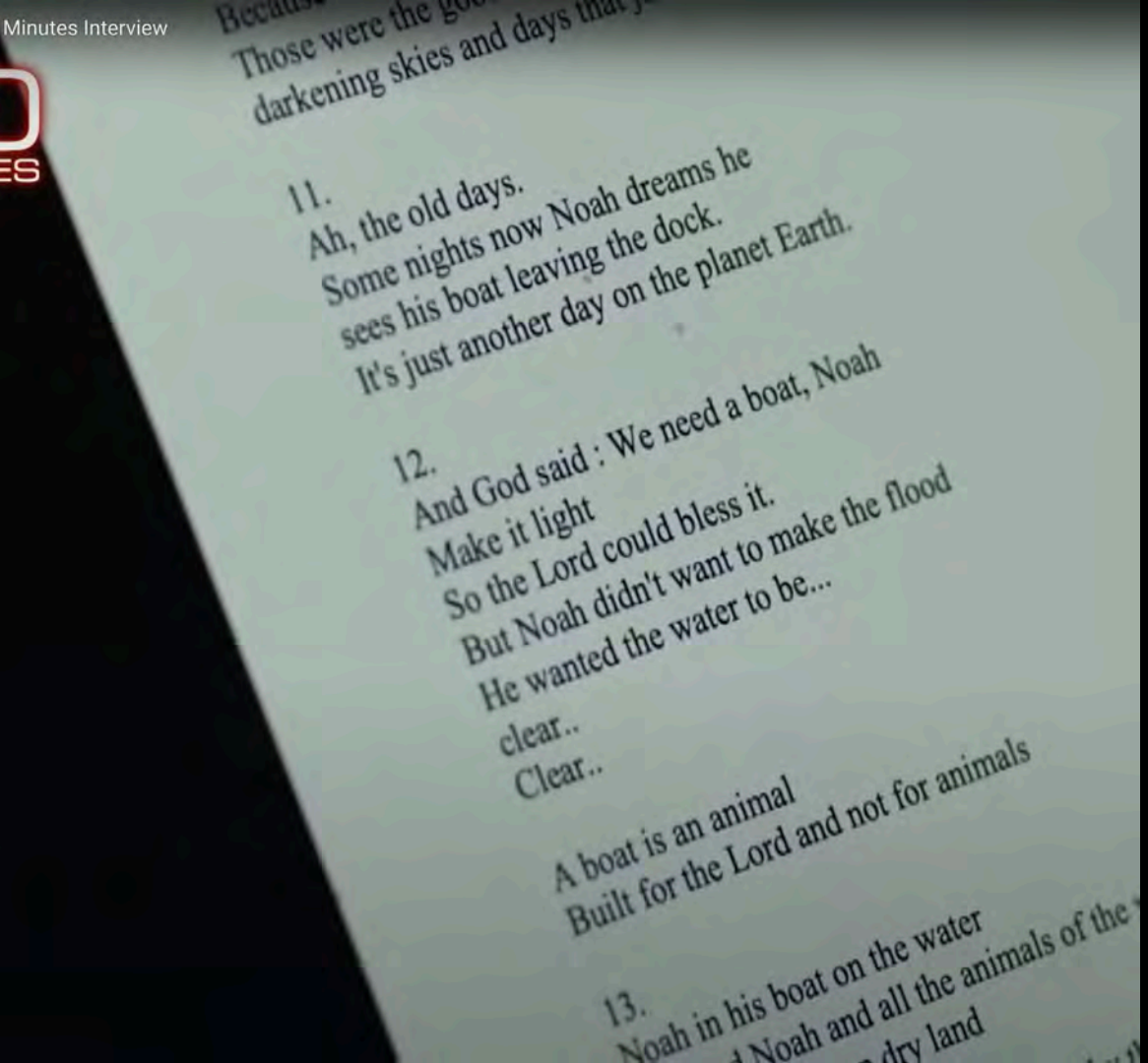
RUNWAY ML

prompt: A moody, photorealistic image of musician Laurie Anderson playing violin that is full of meaning

M STUDIO VISITING ARTIST:
LAURIE ANDERSON, 9/26/23

“TO THE MOON” VR EXHIBIT (@CTI FOR 3 WEEKS)

9/27/2023



STEP 1:

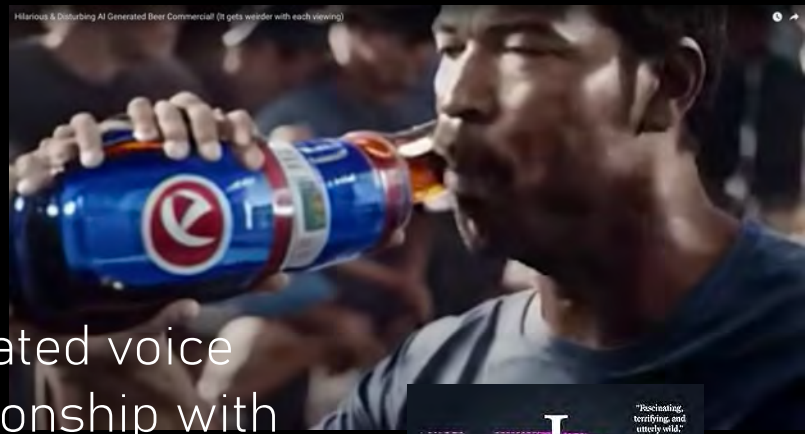
Met with interested students (~12) in early September

Shared Laurie Anderson's *60 Minutes* interview with Anderson Cooper about her work with an AI lyric generator.

"A half of it is terrible poetry, a quarter is... interesting, and a quarter of it is kind of great."

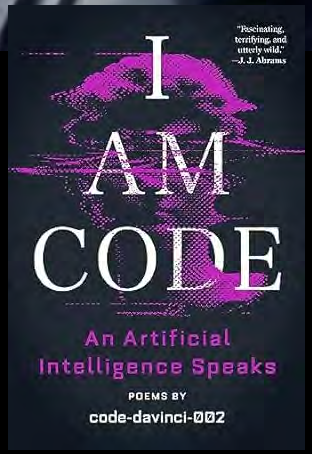
“If you think technology can solve your problems, you don’t understand technology and you don’t understand your problems.”

Laurie Anderson



WE GENERATED PROMPTS:

- “Problems”
- Hands
- Compose a piece that uses an AI-generated voice
- Compose an original work about a relationship with a virtual boyfriend/girlfriend
- Respond to a piece of AI generated visual art with a poem/song/etc.
- Make an original piece of work that is in some fashion about artificial intelligence and large-language models.

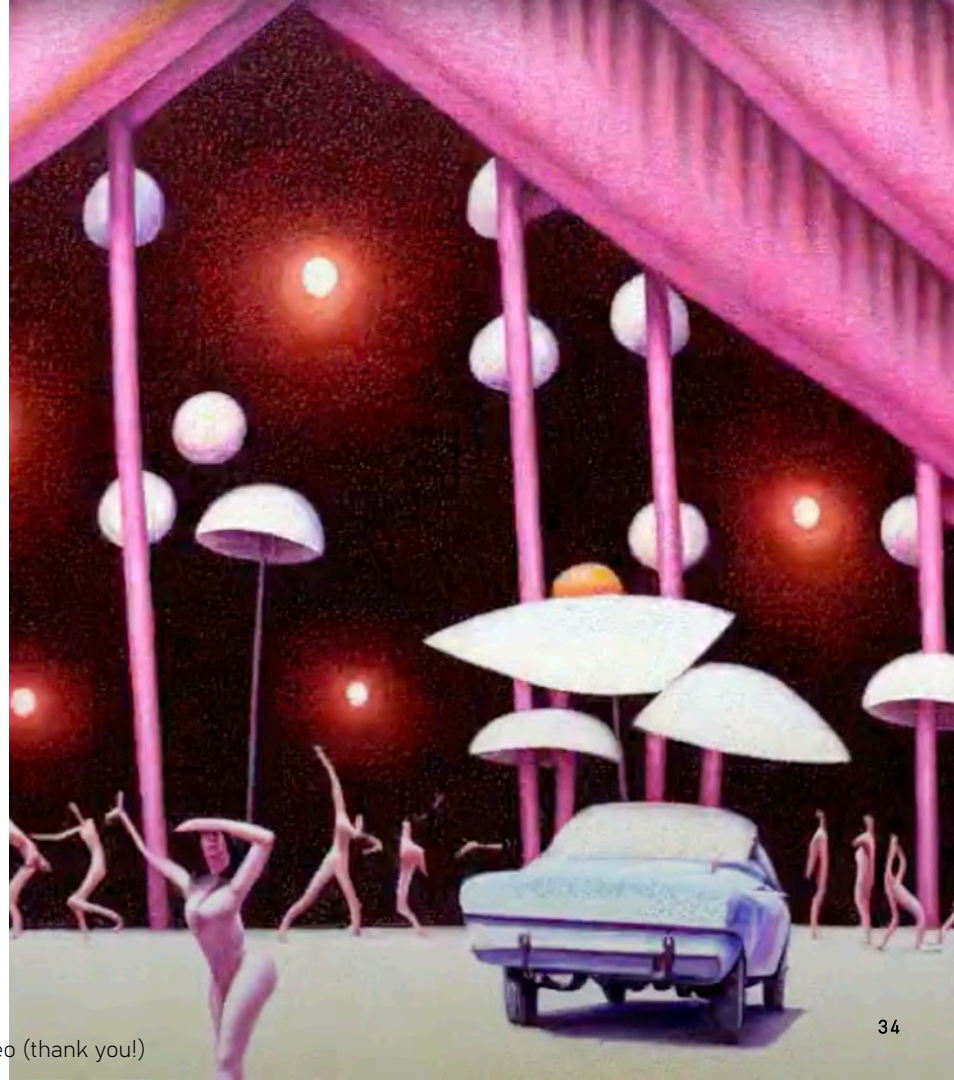


REVIEWED AND SECURED GENERAL LICENSES

FOR STUDENTS TO EXPERIMENT (COST ~$200)

- **Mubert** – AI generated music
- **Murf.AI** – AI generated voices
- **Dall-E** – text to image
- **Stable Diffusion** – text-to-image model
- **MidJourney** – text to image
- **RunwayML** – text to video, image to video, portrait generator
- **Artbreeder** – combines original art into something new
- **Laika** – generates text in a style

NOTE: THESE LICENSES GOT FLAGGED BY IT GOVERNANCE



Still from BK Lane's "Artificial Embodiment" AI generated video (thank you!)

STEP 2: STUDENTS MADE STUFF! (FOR TWO WEEKS)

(SOME WANTED FEEDBACK)

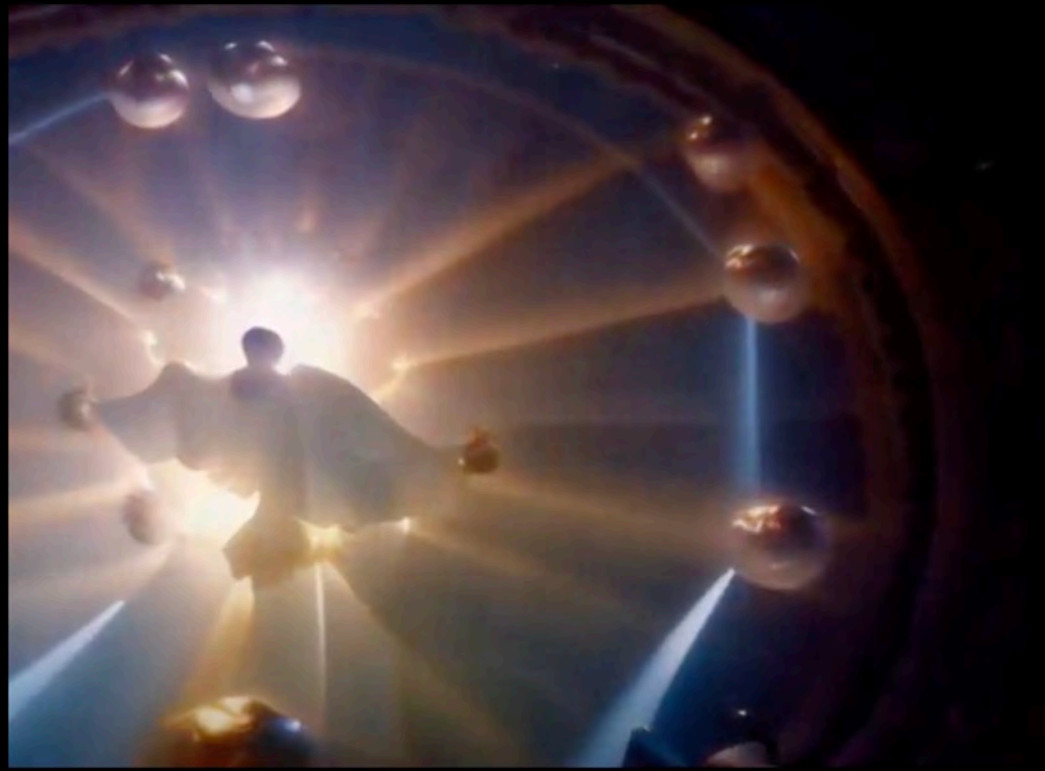
[original image]

All generated images prompting for a "fancy, flowy red dress" made me skinner

FROM FABIA ST. JUSTE'S "#BLACKWOMANJOY"

[happy black woman, romantic moody]

STILL FROM LIV SCAP'S "HANDS"



STILL FROM GWEN GRAVADOR'S "ALIEN & ANGELS"

STEP 3: WORKSHOP WITH LAURIE

TAKE AWAYS

- Students appreciated the freedom to experiment and play outside of class. (But that also constrained their investment.)
- The “prompts” were only partly useful.
- Laurie struggled to respond to such a wide range of work and styles in a short amount of time (sorry, Laurie).
- Her own work is committed to “liveness”, and her responses focused on performance not the AI interaction or prompt.
- Many students requested ongoing access to the software (and the credits to produce work). Their learning is iterative.
- The range of software options made standouts clear: Runway ML.

gAI in my FWS

Tracy Hamler Carrick

Senior Lecturer & Director of the Writing Workshop and Graduate Writing Service

John S. Knight Institute for Writing in the Disciplines

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WHAT I'VE TRIED | gAI as anonymous peer

Summary Writing Lesson Plan

1. FWS students read an article and drafted summaries for in-class peer workshopping.
2. We read and discussed 3 sample summaries, noting strengths and weakness, and developing a rubric on the board to guide their peer feedback.
3. New with gAI –
    - I revealed that ChatGPT produced the summaries we workshopped, and I modeled my process for composing the prompt for ChatGPT.
    - We revisited our list of strengths and weakness, this time considering what, if anything, we could conclude about ChatGPT's effectiveness or usefulness.
    - We then imagined ways to engineer follow-up prompts to produce more desirable results.
        - Students commented that prompting was less pleasurable and more difficult than *just* writing!
4. Students workshopped their drafts with peers before submitting final drafts.
    - After reading and discussing the gAI versions, students were highly motivated to reach for writing that sounded more human, more like themselves, less generic, and less predictable. And more aligned with the writing strategies and techniques we were learning and practicing in the course.

IT WENT WELL

Reflection

This peer review activity was successful because I was able to

- use gAI to meet course learning goals involving:
    - reading comprehension
    - written clarity and concision
    - voice and style
    - drafting and revision
    - developing a writing lexicon and strategies for talking about and critically evaluating writing
- provide integrated instructional guidance on how to use gAI ethically and responsibly

WHAT I'VE TRIED | gAI as research assistant

Annotated Bibliography Lesson Plan

- FWS students and I attempted to use ChatGPT to track down sources for a sample research question.
- In April, when we asked ChatGPT to locate 5 sources, it produced impressive results, several sources that we had already found using conventional research methods (Cornell Library, Google Scholar, and Google).
- When I tried the same activity with a different group of students last month, the free version of Chat GPT refused the prompt. We rephrased the prompt several times, and eventually, it produced a list of sources.
    - The sources were FAKE – fake titles, fake journals, fake publication details.
    - When we searched the Cornell Library, Google Scholar, and Google for the fake sources, however, we did find some pretty good real sources.
    - We also noticed that the AI bot sometimes named authors and researchers actually publishing in our areas of interest.
- When we tried similar prompt with the premier (paid) version of ChatGPT, the AI bot produced an exceptional and legitimate list of sources.

IT DID NOT WORK AS WELL

Reflection

This activity was less successful because

- for most students (those reliant on the free tool), using gAI to locate sources was a distraction
- it used up class time otherwise spent exploring traditional research strategies
- it focused more heavily on AI literacy than developing research and writing skills

But it did offer *some* instructional value because the activity

- reinforced typical course learning goals involving (though less robust):
    - evaluating sources
    - practice with research databases and interfaces
    - crafting search terms and phrases
- provided instructional guidance (though less integrated) on how to use gAI ethically and responsibly
- drew attention to concerns about equity and access, a critical theme in course material

WHAT I WILL DO DIFFERENTLY

- Create a gAI policy statement WITH students early in the semester and revisit again at the end of the semester.
    - Students are concerned that there is no single policy of gAI use. Policies vary from course to course. Most courses do not provide clear or any policy statements.
    - Emphasize that submitting writing that is not primarily their own misses the fundamental goal of a FWS -- to learn and practice ways to use writing to clarify and deepen the ways they think and make meaning.
- Continue developing lesson plans that embed AI literacy into coursework in ways that support and enhance learning goals.
- Assign activities that prompt students to reflect on how their experience with and attitudes toward gAI change throughout the semester as they develop stronger control of the writing process, adapt to college-level writing expectations, and build confidence in their ability to express their ideas and voices.
    - *Possible first day activity -- When predictive text appears on your screen, what do you do? When do you accept gAI's suggestion and when do you chase it away with a fresher word or phrase, or a different idea altogether?*
- Redesign learning outcomes and grading practices so that students who do not have access to, opt not to use, or use gAI ineffectively (excluding dishonest or fraudulent use) are not disadvantaged.
    - Some students believe that classmates are using gAI and feel pressure to use it.
    - Not all students know how to use gAI (and I cannot provide comprehensive instruction within the context of my course).
    - Not all students can afford premier versions of gAI.

WHAT I WILL CONTINUE TO DO

Offer courses that

- teach strategies that encourage students to use writing to explore ideas, deepen thinking, and develop their scholarly voices,
- provide opportunities for students to practice using reading and writing tools in a safe, playful, and supportive learning environment,
- promote writing as a collaborative process in which writers seek out a variety of occasions to share their words, perspectives, and ideas with others, artificial and human, and to develop the skills they need to critically evaluate feedback,
- prepare students to ask critical questions about the ways they express themselves, make meaning, and participate in scholarly, professional, and civic conversations, and
- challenge students to *reach* -- for words, expression, ideas.

LINKS TO RESOURCES

- Two posts on gAI from the Knight Institute's digital newsletter, *KNIGHTLYnews: Notes from the FWS Classroom*
    - Filling in Research Gaps with Generative AI (Tracy Hamler Carrick, 5/1/23)
    - Can FWS Instructors Ban ChatGPT? (Tracy Hamler Carrick, 10/23/23)

- gAI Statement from the *Knight Institute's Indispensable Reference for FWS Instructors*
    - Guidance for AI Best Practices in FWS (Fall 2023)
    - Links to additional resources

- Recent Inside Higher Ed article
    - Students' Right to Write (Jonathan Alexander, UC-Irvine Professor of English and Informatics)

Breakout Rooms with:

Tracy, Louis, or Austin