2024-02-14

Data in the Humanities

Wk. 03: Histories of DH From IBM to the Big Tent; Command Line

Happenings this week

Workshops

- Thu 2/15 Command Line Power Tools (RC)
- Mon 2/19 Finding the Best Location using QGIS (PUL)
- Thu 2/22 Introduction to GitHub: Enabling Digital Project Collaboration and Sustainable Websites (PUL)

- Thu 2/22, 2/26, 2/27 Introduction to Programming Using Python (RC)

Lectures & Events

- Wed 2/21 LLM Forum: Simon DeDeo & Arthur Spirling on models (CDH)

CFPs

- due Thu 2/15 <u>Mathematical Humanists</u>, Aug. 3–5, 10–12, CHNM at George Mason

Readings

- Brad Pasanek, "<u>Extreme Reading: Josephine Miles and the Scale of the Pre-</u> <u>Digital Digital Humanities</u>," *ELH* 86, no. 2 (2019): 355–85.

 Arun Jacob, "<u>Punching Holes in the International Busa Machine Narrative</u>," in *Alternative Historiographies of the Digital Humanities*, ed. Dorothy Kim and Adeline Koh (Punctum Books, 2021), 121–44.

– Sharon M. Leon, "<u>Complicating a 'Great Man' Narrative of Digital History</u>," in *Bodies of Information: Intersectional Feminism and Digital Humanities*, (Minneapolis: University Of Minnesota Press, 2018), 344-68.

Alan Liu, "<u>Where is Cultural Criticism in the Digital Humanities?</u>" in *Debates in Digital Humanities* (2012)

- Jamie "Skye" Bianco, "<u>This Digital Humanities Which is Not One</u>," *Debates in the Digital Humanities 2012* (Minneapolis: University of Minnesota Press, 2012).

CSVs: what did you find?

The Command Line >_



Navigate

- pwd = print working directory
- ls = list directory contents
- cd FolderName = change directory to this folder name
- cd / = root
- cd ~ = "home" folder on Macs (Contains applications, desktop, downloads, etc)
- cd .. = one directory up / parent directory
- open . = open current directory in GUI/Finder folder

Create

mkdir FolderName = create new folder touch filename.txt = create a new file rm filename.txt = removes file. Caution! permanently gone.

mv filename.txt subfolder/filename.txt = move file

mv filename.txt newname.txt = rename that file in same directory

Download

curl -0 url = download file at a URL.

Flag must be capital O, which means write output to a local file named like the remote file

Try the text of Willa Cather's O Pioneers!

```
curl -0 https://www.gutenberg.org/cache/epub/24/pg24.txt
```

It's possible to bulk download text files from the web (curl w/ filetype)

Windows users: see WSL guide

Manipulate

- open pg24.txt = open a file in default program
- cat = print file contents
- less pg24.txt = print file page by page
 - g to quit
 - 1 and 1 to navigate one line at a time
 - {SPACE-BAR} to advance a full page, b for previous page
 - / to search the text. n for next result, \mathbb{N} for previous result
 - g for beginning of file, g for end of file
- nano = edit a text file's contents
 - no write to that file, add new filename or hit {ENTER} to edit the current file
 - ^x exit nano
- man + command = manual for that command. q will quit

Miscellaneous

top = shows current processes running

`c = exit a program

curl wttr.in = get your local weather

finger princeton@graph.no = graph recent rainfall

Exercise

1) Draw your system's file tree structure.

2) Use the command line to create an interesting tree to share with your neighbor: this could be nested files you could think of as a poem, or a choose your own adventure story using files containing questions and answers you've typed using `nano.

pwd = print working directory

1s = list directory contents

cd {FOLDER} NewFolder = change directory to this folder name

{TAB} autocompletes the directory / file you've begun to type

```
cd / = root
```

cd ~ = "home" folder on Macs (Contains applications, desktop, downloads, etc)

cd .. = one directory up / parent directory

open . = open current directory in GUI/Finder folder

VisiData



Install Homebrew

<u>homebrew</u> is a package manager for the command line. Allows you to install and update software.

Paste the command on the Homebrew homepage into your command line prompt, and hit {ENTER}

brew install {PROGRAM} Allows you to install fun programs like lolcat and fortune and phoon and cowsay and thefuck and sl



brew install saulpw/vd/visidata

Jeremy Singer Vine, Visidata in 60

Seconds

JSV, data journalist and editor of *Data is Plural* newsletter.

Exploratory Data Analysis (EDA)

First described by John Tukey in 1977, exploratory data analysis (EDA) is a subfield of statistics that concerns the exploration of data through visualizations, summary statistics, and modeling techniques. . . . EDA is a particularly useful structure for showing patterns in data with multiple variables.

Suzanne Boswell, "Network Analysis and the Decline of Women Writers in Pulp Science Fiction," *Extrapolation* (2021).

EDA is all about understanding your fields (dates, names, titles) and summarizing the relationships between them.

Frequency tables contain count, percent, and histogram: these are EDA techniques.

EDA often isn't named *as* a method in DH research. But it has a history, and distinct techniques.

Resources

other command line resources

- Explain Shell: Full explanation of any command
- Command Line Cheatsheet: Comprehensive list of basic commands

- <u>Asciinema</u> For recording screen captures of terminal sessions / commands.

You can even copy-paste text from the video!!

- Julia Evans, "A list of new(ish) command line tools"

command line tutorials

- DHRIFT Command Line Tutorial

- John Ladd, Text as Interface

- Kenneth Ward Church, <u>Unix for Poets</u> -- basic text analysis using the Book of Genesis

William Turkel, <u>Basic Text Analysis with Command Line Tools in Linux</u> and <u>Pattern Matching and Permuted Term Indexing with Command Line Tools in Linux</u>

- Shell scripting tutorial, specifically for writing command programs

The Programming Historian

- Introduction to the Bash Command Line
- Counting and Mining Research Data with Unix

Acknowledgments

The command line intro draws in part on the following tutorials:

- John R. Ladd, "Text as Interface: Analyzing Data on the Command line"
- Kenneth Ward Church, Unix for Poets
- DHRIFT Command Line Tutorial
- Thanks Laure Thompson for the WSL instructions!