# The What, Where and How: A **Discussion on Digital** Humanities and Government Information

## Welcome

- 1. What is Digital Humanities?
- 2. Examples of Gov Info in Student Projects
- 3. Tools to Explore
- 4. Data Resources & Corpora
- 5. Discussion

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## Adventures in Digital Humanities (from a novice)

- •2009 Literature Grad Student
- •2013 Art History Student
- •2015 Digital Media Undergraduate Thesis Project





### Free to Use and Reuse: Presidential Portraits

Learn more about presidential portraits. Browse more content that is free to use and reuse.

## **Outreach Tips**

- It's ok not to be the digital humanities expert
- Talk with your humanities colleagues
- Talk with your data colleagues
- Check out some of the tools we'll be talking about
- Have fun!

## Tools to Explore

- Text Analysis Tools
- Data Visualization Tools
- Digital Mapping Tools



### Text Analysis Tool: Bring your own corpora

Voyant Tools

**Open Source** 

variety of formats, including plain text, HTML, XML, PDF, RTF, and MS Word

Example shown here is Public Papers of the Presidents Obama, 2014.

Comtosta (# Bubble	lines 🔲 Correlations			
Document	Left	Term	Right	
1) Bara	stretch, America had put more	pe	back to work than all	
1) Bara	just. To expand opportunity for	pe	in every corner of our	
1) Bara	sending some of our best	pe	our troops, scientists, health care	
1) Bara	our relationship with the Cuban	pe	and by beginning to bury	
1) Bara	life better for the American	pe	Because thanks to their efforts	
t) Bara	importantly, we could potentially put	pe	to work all across the	
1) Bara	And as a consequence, the	pe	who sent us here, they	
t) Bara	Boston. That's a lot of	pe.	It would be a bad	
1) Bara	to get by There are	pe	who are working hard, they	
1) Bara	out the safety net from	pe	trying to work their way	
t) Bara	one Nation and as one	pe.	Economic patriotism would say that	

### Example: Caselaw Access Project Historical Trends

Similar to Google Ngram Viewer

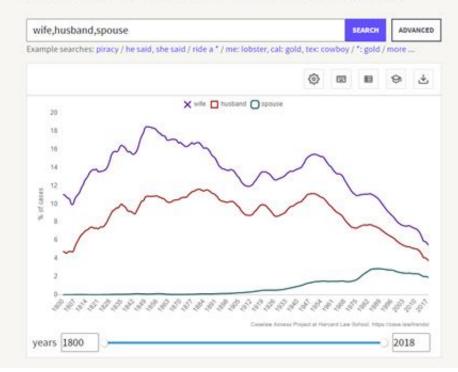
More at <u>https://case.law/trends/</u>



ABOUT CASELAW GALLERY LOG IN FOR COURTS CONTACT

## **Historical Trends**

The Caselaw Access Project includes over 6 million U.S. legal cases from the Harvard Law School Library — about 12 billion words in all. Our Historical Trends tool graphs the frequency of words and phrases through time, similar to the Google Ngram Viewer.



### U.S. Treaties Explorer

Each circle represents a treaty signed by the U.S. Hover over a circle to see more details or click it to visit the treaty document page. To view treaties signed with individual countries, select or type the name of the country in the dropdown menu below. To see bilateral treaties (signed with one other country), type or select silateral in the menu. To see treaties signed with multiple countries or international organizations, type or select Nultilateral, International organizations, other in the menu. To see all treaties type or select All in the menu.



### Example: U.S. Treaties Explorer

## Treaty data from Congress.gov $\rightarrow$ JSON

Used Python to create beeswarm plot

More at http://gentleknowledge. com/studentprojects/congresstreaties/

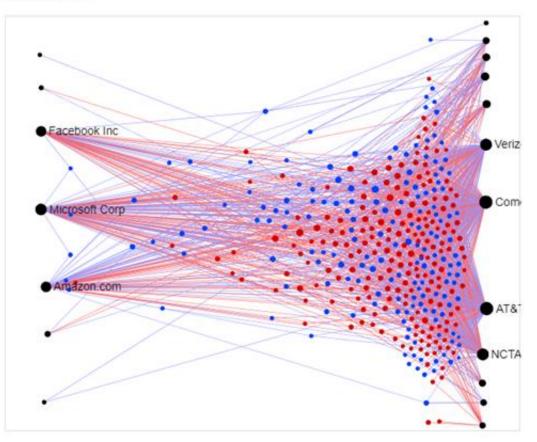
2010

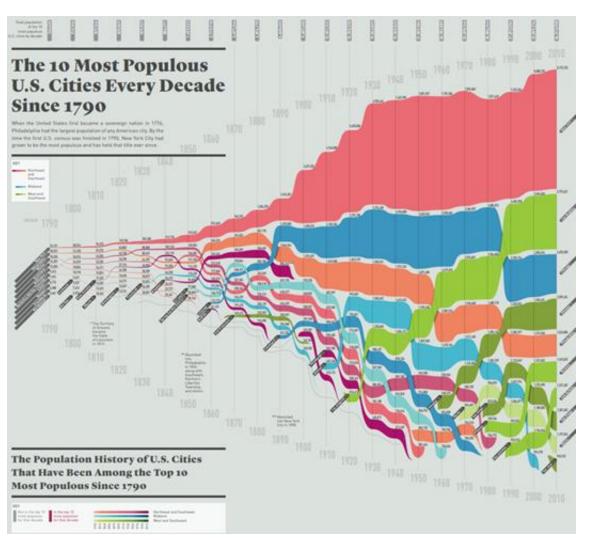


**Example: Network Analysis** Visualize tabular data

Tools for network analysis: Gephi, Cytoscape, R

More about this example at: <u>https://www.opensecrets.org/news/iss</u> <u>ues/net\_neutrality/</u> Lobbying clients who have lobbied the FCC on net neutrality and their PAC contributions to members of the 115th Congress





### **Data Visualization Tool**

Bring your data RawGraphs https://rawgraphs.io/

### Open source data visualization

Make scatterplot, Gantt charts, bump charts, treemaps etc.

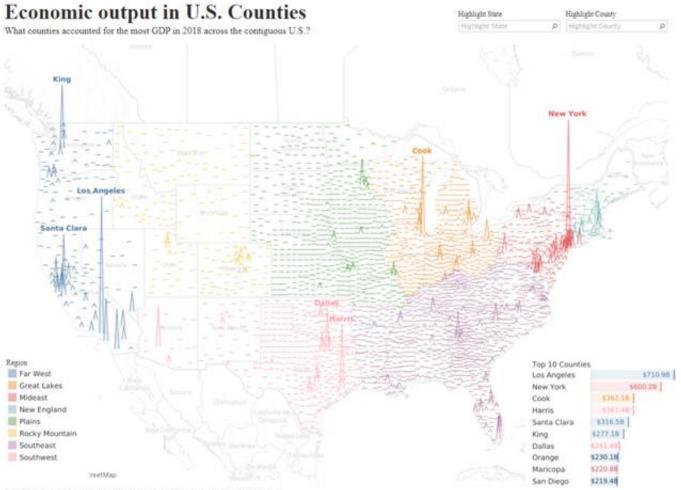
Required formats: tabular data

## Make Maps with Data

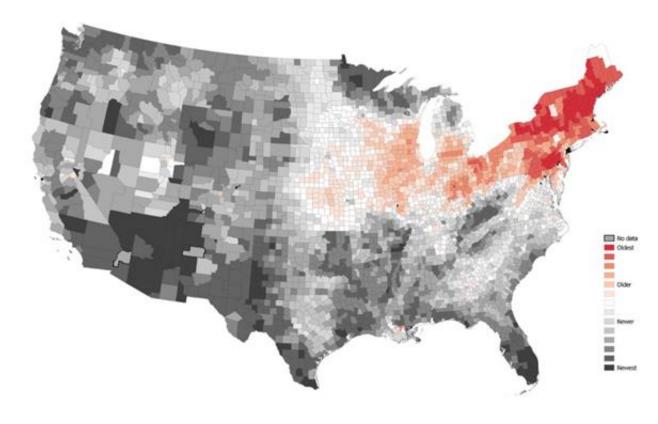
Tableau Public

https://public.tableau. com/en-us/s/

Required Formats: Microsoft Excel, multiple text file formats, statistical files, Google sheets



Data: BEA.gov + \*MakeoverMonday W40 2020 + Viz by Dorian Banutors + canonicalized.com



### Make Maps with Data

QGIS

Open source geographic information system

More information at <u>https://qgis.org/en/site/</u>

#### Rural Housing Age in the United States

Data from the 1940 *Census of Housing* and the IPUMS National Historical Geographic Information System. Processed with QGIS.

## Gov & Nonprofit Data Sources



Open (Freely Available) Data

- Chronicling America
   <u>https://chroniclingamerica.loc.gov/about/api/</u>
- GovInfo Bulk Data Repository
   <a href="https://www.govinfo.gov/bulkdata/">https://www.govinfo.gov/bulkdata/</a>
- American Presidency Project
   <u>https://www.presidency.ucsb.edu/</u>
- GovTrackData
   <u>https://www.govtrack.us/about-our-data</u>
- HathiTrust Research Center\*

https://www.hathitrust.org/htrc

ICPSR\*
 <u>https://www.openicpsr.org/openicpsr/</u>

And there's more ...

## Find More Data

## Look for **Libguides** produced by other librarians Add terms like:

"Open data" "Digital humanities data"

"Free corpora"

"Textual data"

NIVERSITY VIRGINIA

UVa / LibGuides / Digital Humanities Research / Finding Tools & Data

LIBRARY

### **Digital Humanities Research**

Provides resources for researching topics, tools, and organizations in the Digital Humanities.

https://guides.lib.virginia.edu/dh/tools

## Berkeley Library

Library / Library Guides / Government Policy and Information / U.S. Data and Statistical Sources / Tex

Search this Guide

### U.S. Data and Statistical Sources: Textual

#### Data

ABOU

Provides access to federal statistics on various subjects and topic areas.

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https://guides.lib.berkeley.edu/US-Stats/text

## Find Data on the Web

#### Search Google Dataset Search

https://datasetsearch.research.google.com/

Suggested Terms:

"Open data"

"Data portal"

... add a geographic area if possible

Ex: California State open data

### Or GitHub

https://github.com/aw esomedata/ aw esome-public-datasets

#### Awesome Public Datasets

#### --

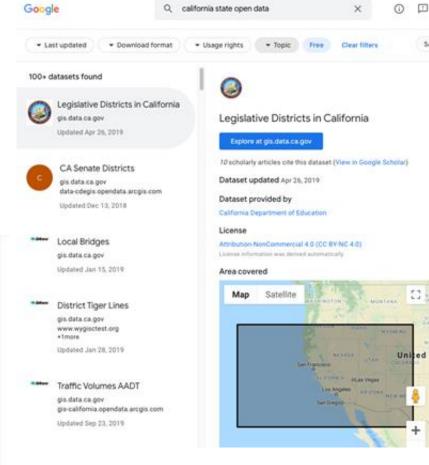
NOTICE: This repo is automatically generated by apd-core. Please DO NOT modify this file directly. We have provided a new way to contribute to Awesome Public Datasets, Join the slack community for more communication.

- · O I am well.
- Ø Please fix me.

This list of a topic-centric public data sources in high quality. They are collected and tidled from blogs, answers, and user responses. Most of the data sets listed below are free, however, some are not. Other amazingly awesome lists can be found in sindresorhus's awesome list.

#### **Table of Contents**

- Advisiture
- Biology
- Climate+Weather
- ComplexNetworks
- ComputerNetworks
- DataChalenges
- EarthScience
- Economics Education



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https://datasetsearch.research.google.com/

#### DIGITAL SCHOLAR LAB

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Last new by making about Swatch Strategies.

Major vendors also support Text & Data Analysis (TDM) – For a Fee

- JSTOR data for research
   <u>https://www.jstor.org/dfr/</u>
  - Free or by Agreement
- Gale Digital Scholarship Lab
- As well as:
  - SpringerLink
  - Proquest
  - Wiley
  - SAGE Journals
  - Taylor & Francis

## Communicating with Patrons & Vendors

Text mining is not automatically included with database access - check the license!

### **Details to Convey to Vendors**

- What is the scope and type of information needed?
  - Entire database of news articles? Full run of pdfs from a specific journal?
- How will the data be accessed? Some methods create server issues!
  - Screen scrape? Notify a site administrator first
  - Bulk download? The vendor may need to do it, usually incurs a fee
- One-time occurence or ongoing need?
  - If ongoing, what frequency? Monthly, annual?
- What is the timeline?
  - Procuring data can take much longer than many researchers realize!

## **Discussion**

## **Project Examples**

Topic Modeling Obama Word Cloud https://obamaw hitehouse.archives.gov/blog/2011/01/26/state-unionw ord-cloud-jobs-america-people-new

Mapping Cuban Battlefields http://cubanbattlefields.unl.edu/

Making

3D Model of President Lincoln's Right Hand https://www.loc.gov/exhibits/lincoln/journey-to-washington.html https://blogs.loc.gov/thesignal/2020/01/librarys-collections-come-tolife-as-3d-models/

Word Frequency Caselaw Access Project Historical Trends https://case.law/trends/ Visualization U.S. Treaties Explorer http://gentleknow.ledge.com/student-projects/congress-treaties/

Netw ork Analysis Open Secrets: Lobbying Clients who have lobbied FCC on net neutrality https://www.opensecrets.org/news/issues/net\_neutrality/

Data Visualization Raw Graphs The 10 Most Populous U.S. Cities Every Decade Since 1790, Marco Giannini. https://raw graphs.io/gallery\_project/the-the-10-most-populous-u-s-cities-everydecade-since-1790/

Mapping Tableau Public Economic Output of U.S. Counties <u>https://public.tableau.com/en-us/gallery/economic-output-us-counties?tab=viz-of-the-day&type=viz-of-the-day</u>

Mapping

QGIS Rural Housing Age in the United States. Christopher Riley. QGIS Map Show case: https://www.flickr.com/photos/60869609@N04/49219293838/in/pool-ggis/