

Fundamentals of Text Mining: Analysis Activity

3 - Presidential Inaugural Speeches

Summary: In this activity we will explore different ways to examine and visualize your datasets using [Voyant](#).

About Voyant

Voyant is a web-based reading and analysis environment for digital texts. It is freely available here: <https://voyant-tools.org>

The tool is open source, and is widely used by Digital Humanists using text analysis and visualization. It is an ideal tool to experiment with in order to familiarize yourself with the process of importing textual data, analyzing it, then creating and interpreting the results as visualizations. One drawback of the tool is that it is hosted on the McGill University servers, and so its ability to process very large datasets is limited. It is possible, however, to install it on a home or local server.

Key features include:

- Importing documents in various formats (plain text, HTML, XML, PDF, RTF, MS Word, ODF, etc.)
 - Several tools for studying term frequencies and distributions within documents and within a collection of documents (a corpus)
 - A full-text reader that supports very large texts and includes interactive features
 - Interaction between the tools that facilitates navigation and exploration at different scales (from "close reading" to "distant reading")
 - A mechanism for bookmarking and sharing instances of Voyant Tools (specific texts and tools) through persistent URLs
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Instructions:

- **Upload to Voyant**
 - To upload a group of documents, you must first create a zip file of your dataset folder
 - Upload the zip file to Voyant:
 - From the landing page, select the zip folder you have just created.
 - Click 'upload'.
 - Voyant will do the work of expanding the archive and processing all of the documents in your dataset.
- **Understanding the Dashboard View**

- Familiarize yourself with the dashboard.
 - List three pieces of information about your content set that you can see at a glance from the dashboard view.
 - What are your overall impressions of the Voyant dashboard? Do you find it intuitive and user friendly? If not, what do you find unclear or challenging?
 - What is a stopword? [hint: read the 'help' documentation]
 - How would you add a tool to the dashboard that is not included in this default dashboard view?
 - **Voyant Suite of Tools**
 - Voyant provides a range of tools and options for text analysis. What information can you learn from the following tools and visualizations? [hint: Voyant help documentation is useful].
 - Cirrus
 - Document Terms
 - Mandala
 - Contexts
 - Choose your own tool
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- **Explore your Dataset using Voyant**
 - An opportunity to explore your datasets using the tools embedded in Voyant. The goal is for you to experiment with your data, to customize tool options and to create a visualization or two.
- **Your dataset**
 - In this dataset, you will find the inauguration speeches of every U.S. president from Washington through Trump, each saved as a separate text file:¹
 - Washington 1789
 - Washington 1793
 - Adams John 1797
 - Jefferson 1801
 - Jefferson 1805
 - Madison 1809
 - Madison 1813
 - Monroe 1817
 - Monroe 1821
 - Adams John Quincy 1825
 - Jackson 1829
 - Jackson 1833
 - Van Buren 1837
 - Harrison 1841
 - Polk 1845

¹ Credit for text file compilation:

<http://dhresourcesforprojectbuilding.pbworks.com/w/page/69244469/Data%20Collections%20and%20Data%20assets#demo-corpora>

- Taylor 1849
- Pierce 1853
- Buchanan 1857
- Lincoln 1861
- Lincoln 1865
- Grant 1869
- Grant 1873
- Hayes 1877
- Garfield 1881
- Cleveland 1885
- Harrison 1889
- Cleveland 1893
- McKinley 1897
- McKinley 1901
- Roosevelt Theodore 1905
- Taft 1909
- Wilson 1913
- Wilson 1917
- Harding 1921
- Coolidge 1925
- Hoover 1929
- Roosevelt Franklin 1933
- Roosevelt Franklin 1937
- Roosevelt Franklin 1941
- Roosevelt Franklin 1945
- Truman 1949
- Eisenhower 1953
- Eisenhower 1957
- Kennedy 1961
- Johnson 1965
- Nixon 1969
- Nixon 1973
- Carter 1977
- Reagan 1981
- Reagan 1985
- Bush George H W 1989
- Clinton 1993
- Clinton 1997
- Bush George W 2001
- Bush George W 2005
- Obama 2009
- Obama 2013
- Trump 2017

- **Most Frequent Words comparison**

- Open two Voyant windows:
- Load the entire corpus of speeches in one window, and load a single speech in the other Voyant window. Compare the word clouds.
- Are the most frequently used words in the single document the same ones that appear most frequently in the larger corpus? Describe any differences you observe.

- Split your corpus into four subsets, one from each century (18th/19th/20th/21st). What differences do you discern in each of the subsets?

- **Presidents at War**

- The American Revolution/War for Independence
1775 - 1783
President: George Washington
Spurred on by the Boston Tea Party in 1773, 13 North American colonies fought Great Britain in an effort to achieve independence from British rule.

- The War of 1812
1812 - 1815
President: James Madison
Called the "Second War of Independence", the War of 1812 began after Britain began seizing American sailors and doing its best to interrupt American trade.

- The Mexican-American War
1846 - 1848
President: James K. Polk
The U.S. clashed with Mexico after it resisted Polk's vision of a "manifest destiny" for America. War was declared as part of America's effort to expand westward, with the first battle taking place on the Rio Grande. By 1848, had claimed land including the modern-day states of Utah, Nevada, California, New Mexico, and Arizona.

- The Civil War
1861 - 1865
President: Abraham Lincoln
Lincoln's opposition to slavery was well known and seven southern states seceded from the union when he was elected, forming the Confederate States of America. The Civil War broke out as Lincoln took steps to bring them back into the fold, and emancipate their slaves in the process. Four more states seceded before the dust from the first Civil War battle had settled.

- The Spanish American War
1898
President: William McKinley
Tensions first began escalating between the U.S. and Spain in 1895 as Cuba fought back against Spain's dominance and the U.S. supported its efforts. Spain declared war against America on April 24, 1898. McKinley responded by declaring war as well on April 25. Not one to be upstaged, he made his declaration "retroactive" to April 21. By December, the conflict was over, with Spain relinquishing Cuba and ceding the territories of Guam and Puerto Rico to the U.S.

- WW1
1914 - 1918
President: Woodrow Wilson
The First World War broke out in 1914. The Central Powers of Germany, Bulgaria, Austria, Hungary, and the Ottoman Empire fought against the Allied Powers of the U.S., Great Britain, Japan, Italy, Romania, France, and Russia. By the time the war ended in 1918, more than 16 million people were dead, including many civilians.

- WW2
1939 - 1945
Presidents: Franklin Roosevelt and Harry S Truman
After Hitler invaded Poland and France, Great Britain declared war on Germany two days later. Soon, more than 30 countries were involved, with Japan (among several other countries) joining forces with Germany. By V-E Day in August 1945, this had become the most devastating war in history, claiming between 50 and 100 million lives.

- The Korean War
1950 - 1953
President: Dwight Eisenhower
Credited with being the opening salvo of the Cold War, the Korean War began when North Korean soldiers invaded other Soviet-backed Korean territories in June. The U.S. got involved to support South Korea by August.

- The Vietnam War
1960 - 1975
Presidents: Dwight Eisenhower, John F. Kennedy, Lyndon Johnson, and Richard Nixon
Communist North Vietnam and Russia opposed U.S.-backed South Vietnam. The ultimate death toll included almost 30,000 Vietnamese civilians and roughly an equal number of American soldiers. With chants of "Not our war!" resounding across the U.S., President Nixon finally pulled the plug in 1973. It was two more

years before U.S. forces were officially withdrawn from the region in 1975 and Communist forces took control of Saigon.

- The Persian Gulf War

1990 - 1991

President: President George H. W. Bush

Saddam Hussein invaded Kuwait in August and refused to withdraw his forces when instructed to do so by the United Nations Security Council. Saudi Arabia and Egypt requested the assistance of the U.S. to help prevent Iraq's invasion of neighboring territories. America, along with several allies, complied. Operation Desert Storm raged for 42 days until President Bush declared a ceasefire in February 1991.

- The Iraq War

2003 - 2011

Presidents: George W. Bush and Barack Obama

Iraq again prompted hostilities in the region. The U.S., aided by Great Britain, successfully invaded Iraq, then insurgents responded and hostilities broke out again. The conflict didn't resolve until Barack Obama's presidency when American forces withdrew from the region by December 2011.

Potential questions to consider:

- How did the conflicts the presidents were engaged in affect their inaugural rhetoric?
- Some wars involved multiple presidents; others had a single president over two (or more) terms. Can you discern themes or changes in the rhetoric as the conflict continued?
- What are some of the prevalent words associated with war, and how do they change over time?

You could choose other events to investigate in similar ways (e.g. the Great Depression).

If you want to continue to explore, find the four-box icon for the upper right panel to select a different visualization tool for that panel. The index of available tools describes what each option can do.