

FederalistLex: Unveiling the Linguistic Treasures of the Federalist Papers

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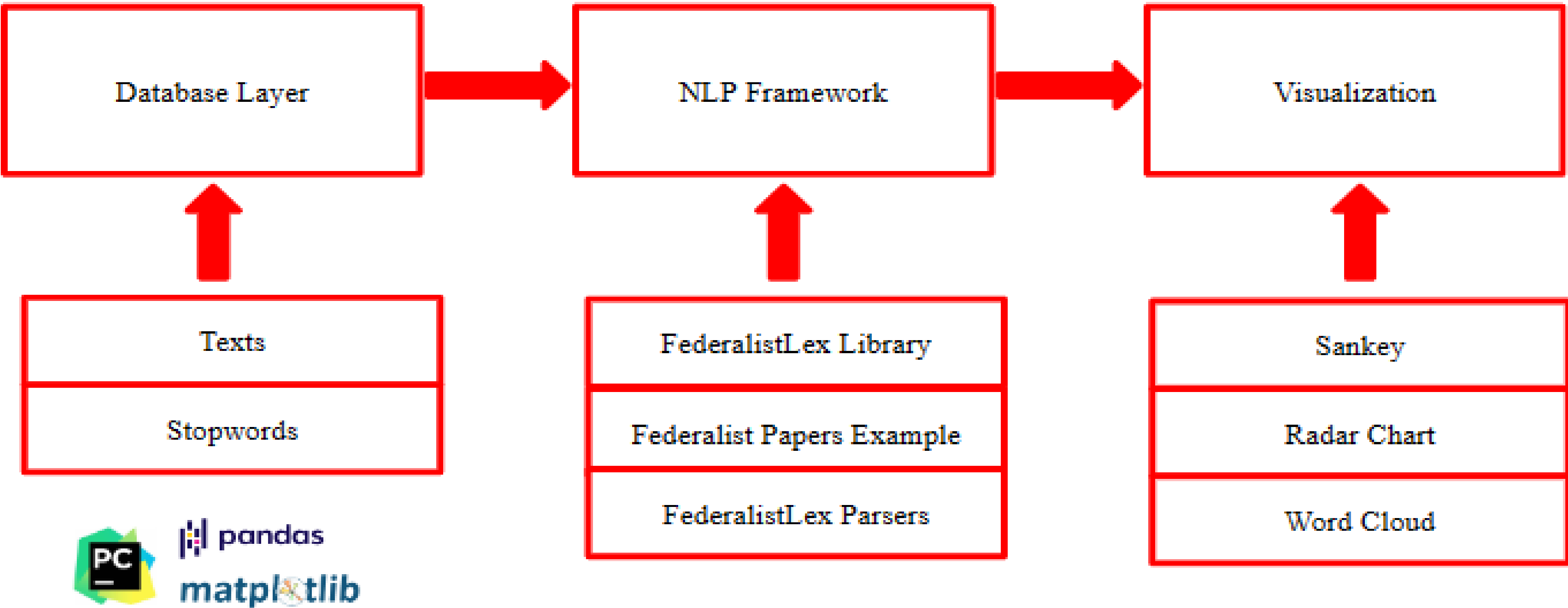
Background, Motivation, and Goals

The Federalist Papers are a collection of 85 essays penned by Alexander Hamilton, James Madison, and John Jay representing a foundational cornerstone of American political discourse. Despite their historical significance, the Federalist Papers remain a rich and untapped source of insights, ripe for exploration and analysis.

We introduce a natural language processing framework tailored specifically for the comparative analysis of the Federalist Papers, FederalistLex, that uses advanced text analysis techniques to inspect complexities within these texts. Specifically, we focused on 8 of the papers providing a systematic approach to studying the Federalist Papers, FederalistLex offers researchers, historians, and political scientists a powerful toolkit for uncovering hidden patterns and gaining deeper insights into the America's founding principles.

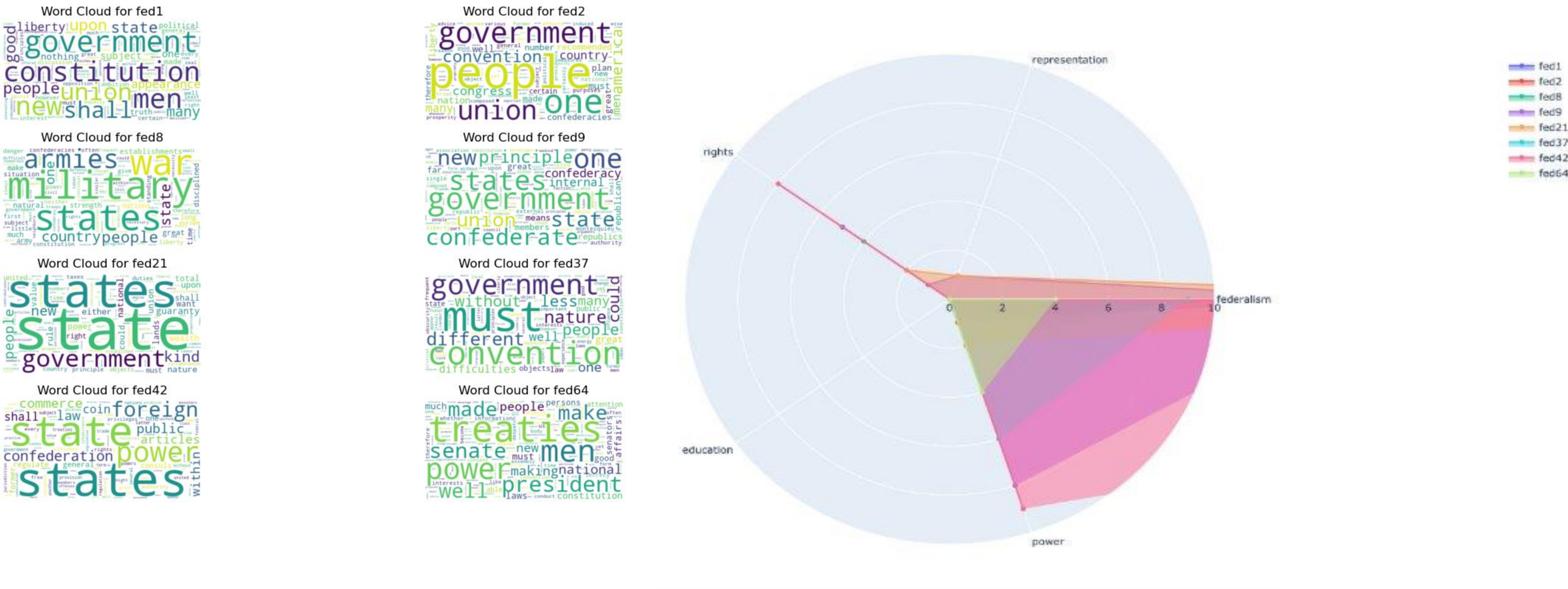
Process and Methods

FederalistLex combines advanced NLP analysis, a robust database, and visualizations to uncover hidden patterns in the Federalist Papers.

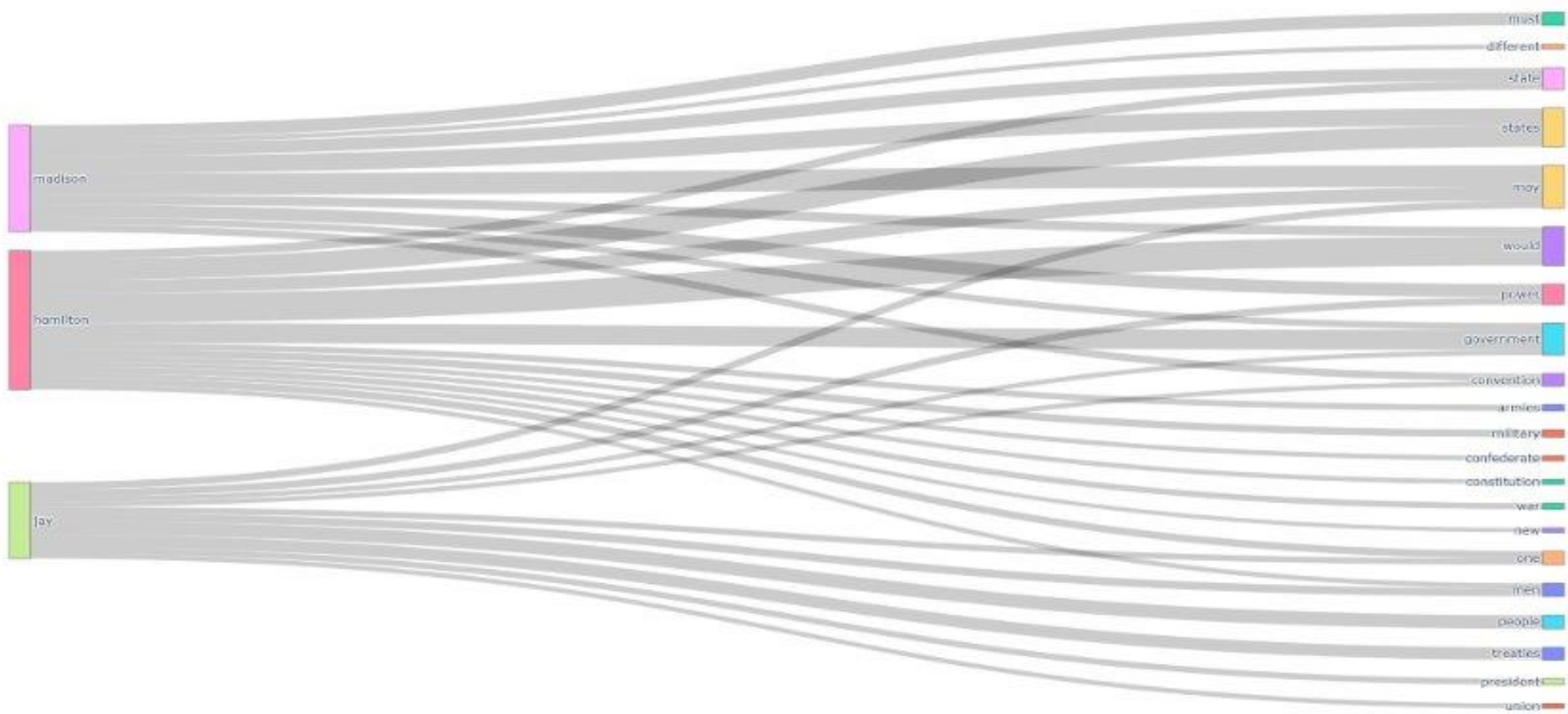


Findings and Products

- **Word clouds** showcasing the most prominent terms in each analyzed Federalist Paper, with the size of each word corresponding to its frequency, offering a visual representation of the key themes and arguments within the papers.
- Our **radar chart** depicting the thematic emphasis of each Federalist Paper, providing a comprehensive overview of the core ideas explored within these seminal texts of American political discourse.



More Findings and Products



- The **Sankey diagram** illustrating the distribution of most frequently used words in the Federalist Papers attributed to Madison, Hamilton, and Jay, providing insight into each author's unique linguistic contributions to the Federalist papers.

Conclusion and Next Steps

Our next steps in the project includes expanding our analysis to show a broader selection of the Federalist Papers, enabling a more comprehensive understanding of the linguistic nuances and thematic variations present throughout. Additionally, we hope to explore other political documents such as the Anti-Federalist Papers, the Declaration of Independence, and contemporary policy documents. By scaling up our NLP framework, we aim to delve deeper into the complexities embedded within additional papers, further enriching our insights into the foundational principles of American governance.

Reference

Hamilton, Alexander, et al. “The Federalist Papers.” Project Gutenberg, 1 July 1998, [www.gutenberg.org/cache/epub/1404/pg1404-images.html](http://www.gutenberg.org/cache/epub/1404/pg1404-images.html)

Author Contributions

Lily Hoffman – 2nd Visualization ; Brandon Hampstead – 3rd Visualization ; Both – 1st Visualization, Parsers, Federalist\_Lex Library