

# The authorship of the Declaration of the Causes and Necessity of Taking Up Arms

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# The Declaration

*The Declaration of the Causes and Necessity of Taking Up Arms* was issued by the Second Continental Congress on July 6, 1775 in defence of the American Revolution.



# Drafting of the Declaration (1775)

June 23: The Congress appoints a committee to draft the Declaration, including John Rutledge

June 24: Rutledge presents his draft

June 26: Rutledge's draft is rejected and Thomas Jefferson and John Dickinson are appointed to the committee and asked to redraft the text

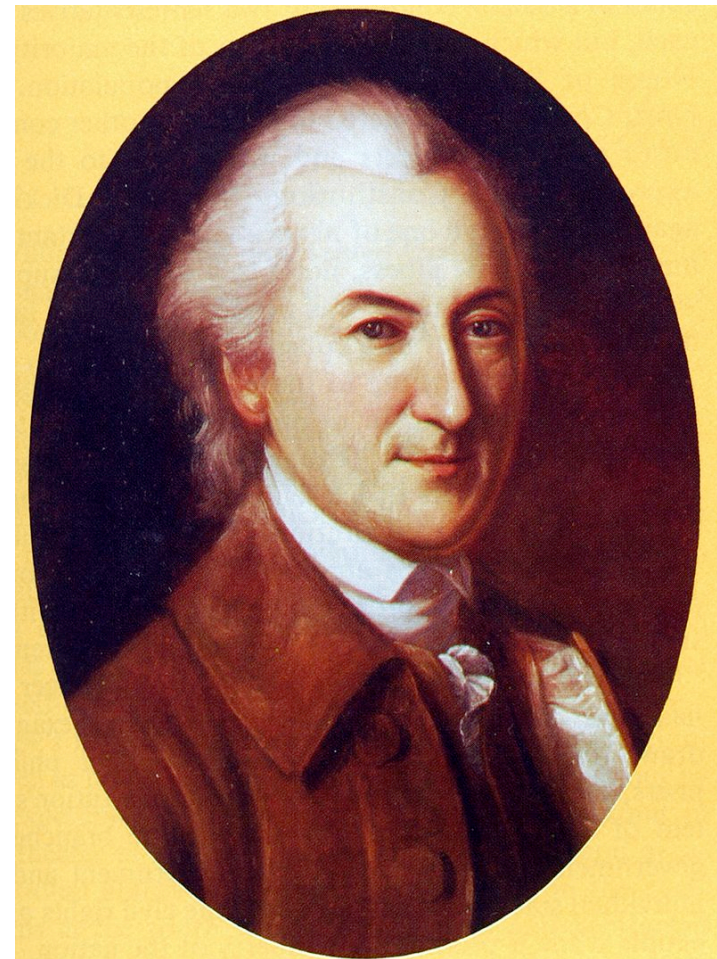
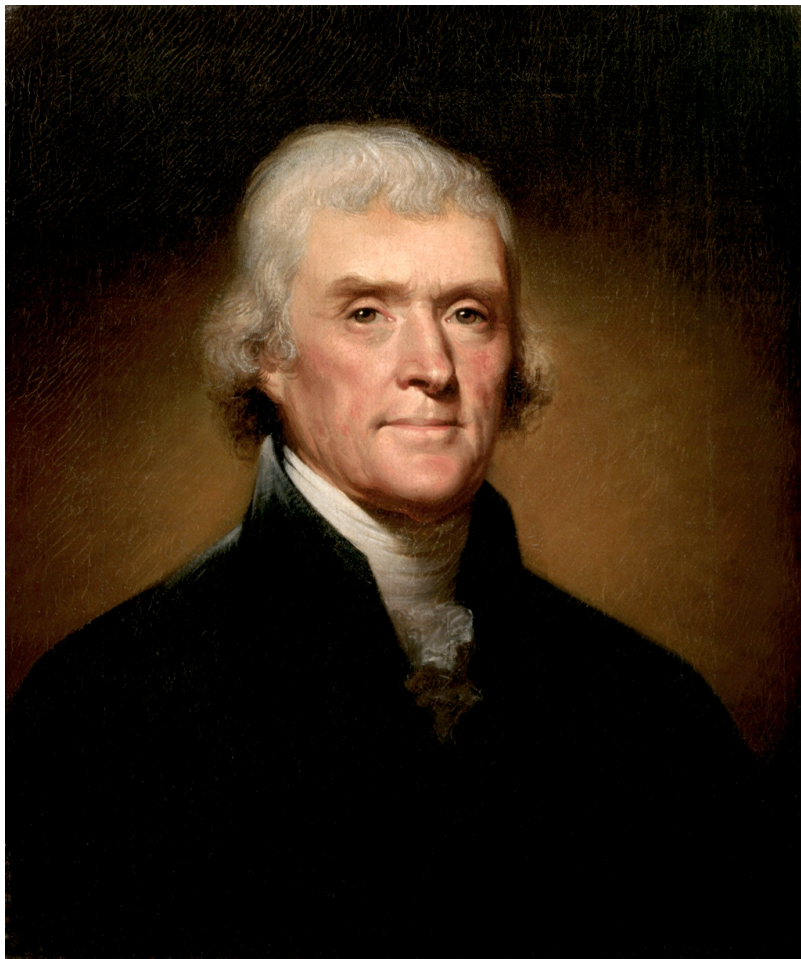
July 6: Their final draft is approved

(Source: Boyd, 1950)



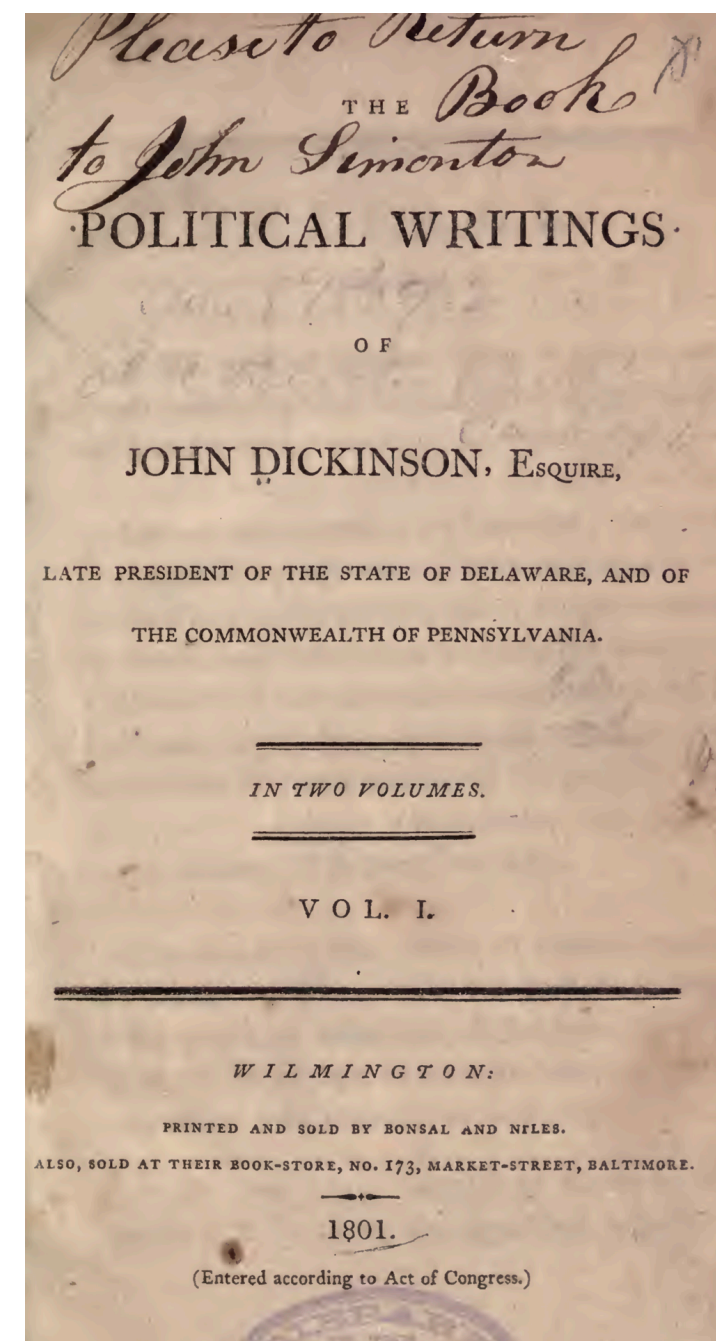
# The Authorship of The Declaration

The Declaration has been attributed to both Thomas Jefferson and John Dickinson.



# Political Writings of Dickinson (1801)

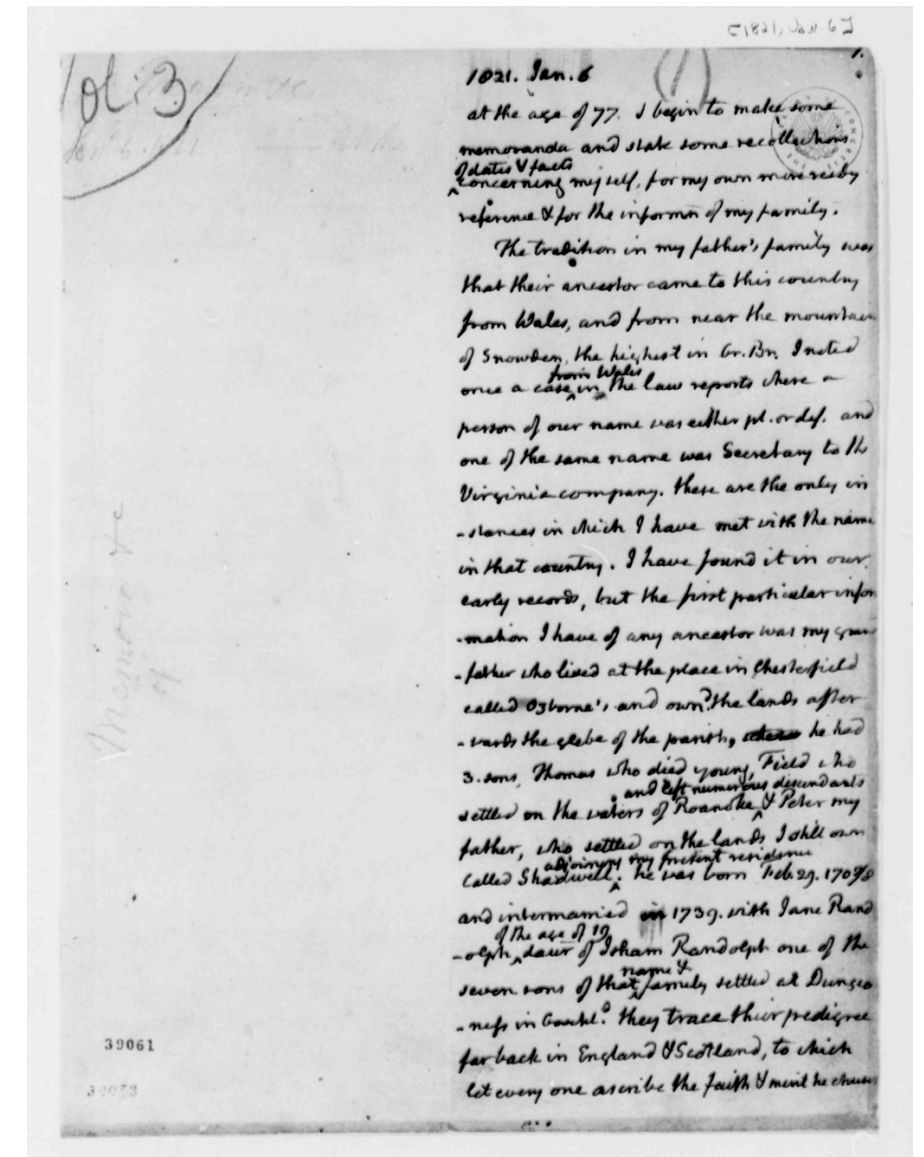
The Declaration was first attributed to a specific author in 1801, when it was published as part of the *Political Writings of John Dickinson*, introduced as having “always been ascribed to the pen of Mr. Dickinson.”





# Jefferson's Autobiography (1821)

In his 1821 Autobiography, Jefferson claimed that he had written the original draft of the Declaration, but that Dickinson had rewritten all but the last 4 ½ paragraphs.



# Jefferson's Autobiography (1821)

“I prepared a draught of the Declaration committed to us. It was too strong for Mr. Dickinson. He still retained the hope of reconciliation with the mother country, and was unwilling it should be lessened by offensive statements.[...]”

# Jefferson's Autobiography (1821)

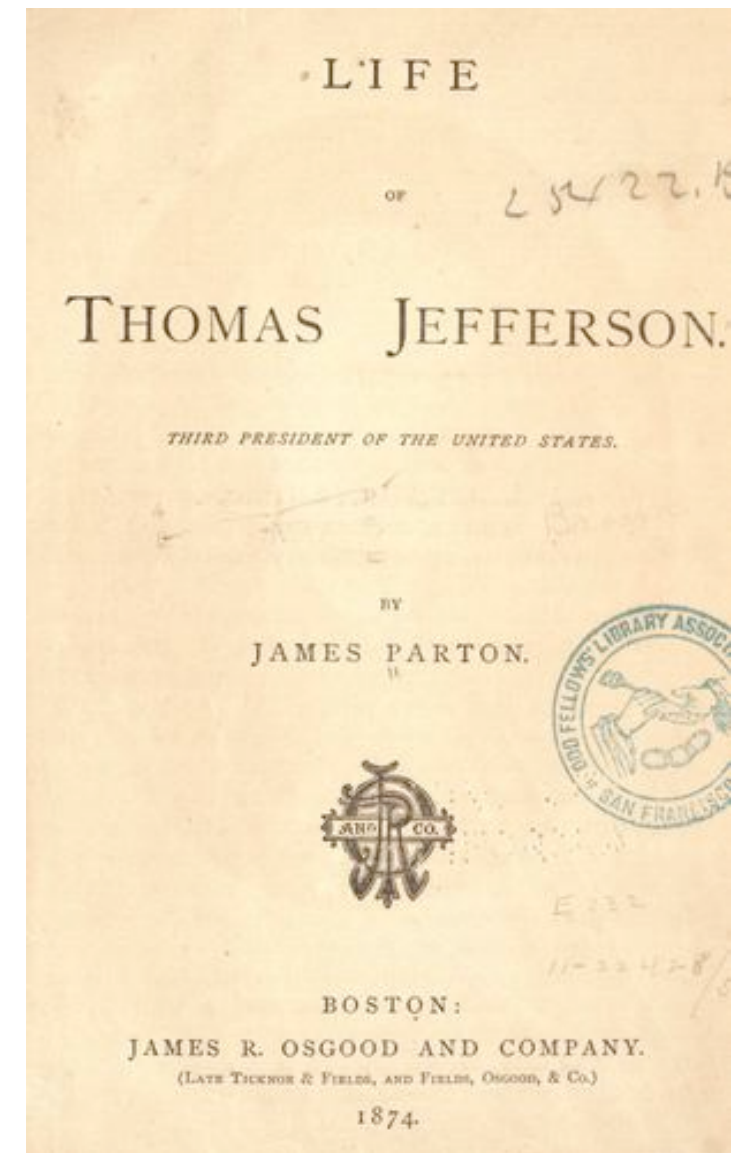
“We therefore requested him to take the paper, and put it into a form he could approve. He did so, preparing an entire new statement, and preserving of the former only the last 4 paragraphs & half of the preceding one.”



# The View of 19<sup>th</sup> Century Historians

In the *Life of Thomas Jefferson* (1874), James Parton wrote:

“If the reader will turn to the document, he will easily discover the precise point where Dickinson’s labored statement ends, and Jefferson’s glowing utterance begins.”



# The Opening of the Declaration

“If it was possible for men who exercise their reason, to believe that the divine Author of our existence intended a part of the human race to hold an absolute property in, and an unbounded power over others,...”

# The Opening of the Declaration

“marked out by his infinite goodness and wisdom, as the objects of a legal domination never rightfully resistible, however severe and oppressive, the inhabitants of these Colonies might at least require from the Parliament of Great Britain some evidence, that this dreadful authority over them has been granted to that body.”

# The Closing of the Declaration

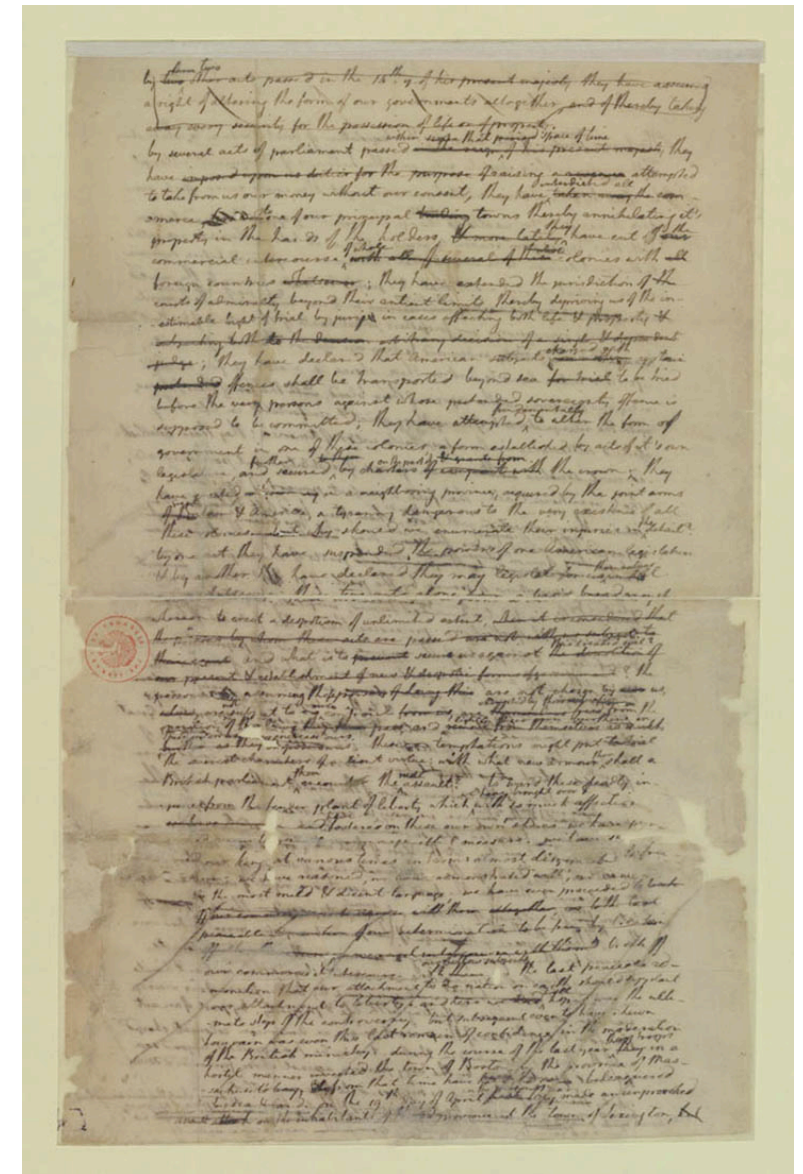
“We are reduced to the alternative of choosing an unconditional submission to the tyranny of irritated Ministers, or resistance by force.”

“Our cause is just. Our union is perfect. Our internal resources are great, and, if necessary, foreign assistance is undoubtedly attainable.”



# Jefferson's Drafts

In the mid 19<sup>th</sup> century  
(published in 1892), two drafts  
of the Declaration written in  
Jefferson's hand were found,  
which were very different from  
the final version of the  
Declaration (Boyd, 1950).



# Jefferson's Note

On the back of the second draft was this note:

“June 24. a draught was reported. June 26.  
being disliked, it was recommitted & Mr.  
Dickinson & T. Jefferson added to the  
committee. The latter being desired by the  
commmee to draw up a new one, he prepared this  
paper.”

# Jefferson's Note

“On a meeting of the commee, J. Dickinson objected that it was too harsh, wanted softening, &c. whereupon the comme desired him to **retouch** it, which he did in the form which they reported July 6, which was adopted by Congress.”

(Source: Boyd, 1950)

# Dickinson's Draft

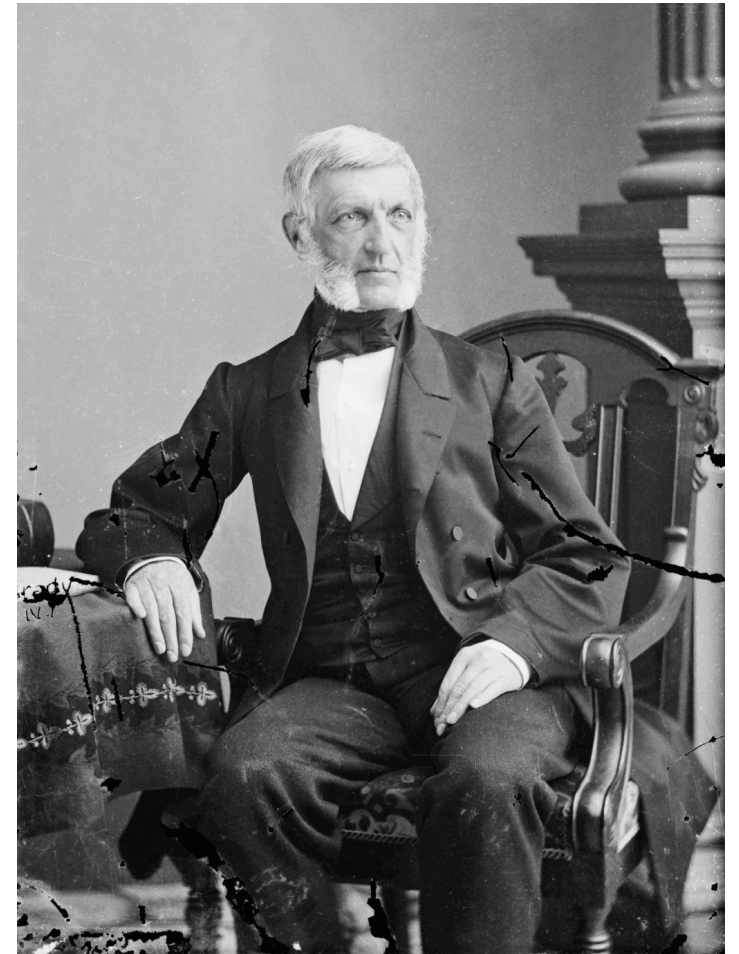
In 1882, a third draft of the Declaration was found written in Dickinson's hand, clearly the last of the three drafts, as it is by far the most similar to the final version of the Declaration.



# The View of Early 20th Century Historians

In *The History of the United States of America* (Volume IV), George Bancroft (1891) wrote:

“It is from the first line to the last, with all amendments, in the handwriting of Dickinson, and precludes the idea that the close was drawn by any hand but his own.”



# Julian P. Boyd (1950)

Based on a close comparison of the three drafts of the Declaration, Julian Boyd (1950) concluded that Dickinson was the primary author of the Declaration, although he borrowed from Jefferson's draft.



# Standard Attribution Today

Wikipedia:

“The final draft of the Declaration was written by John Dickinson, who incorporated language from an earlier draft by Thomas Jefferson.”

# Hypotheses of Authorship

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Primarily by	Boyd (1950)
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Dickinson	Standard Modern Attribution
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Entirely by	Dickinson Volume (1801), Bancroft (1891)
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Dickinson	Standard Early 20 <sup>th</sup> Century Attribution
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Closing by	Jefferson (1821), Parton (1874)
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Jefferson	Standard 19 <sup>th</sup> Century Attribution
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Primarily by	Jefferson's Note
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Jefferson	
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# Limitations of Draft-based Attributions

In general, an attribution based on drafts is unreliable unless the complete set of drafts is available.

In particular, it is entirely possible that Jefferson wrote additional drafts that were the direct basis for Dickinson's draft and the final Declaration.

# Corpus Analysis

To analyze the authorship of the Declaration we compared the Declaration to a corpus of Dickinson and Jefferson's writings.

# Dickinson Corpus

London Letters (1754)

Speech at House of Assembly of Pennsylvania (1764)

The Late Regulations (1765)

Address to Barbados (1766)

Letters from a Farmer in Pennsylvania (1767-1768)

Essay on the Constitutional Power of Great Britain (1774)

Fabius Letters I (1788)

Fabius Letters II (1797)

An Address on Relations of the United States to France (1803)

Unpublished Correspondence (1776-1807)

# Jefferson Corpus

Summary View of the Rights of British America (1774)

Resolutions on Lord North's Conciliatory Proposal (1775)

Draft of the Constitution for Virginia (1776)

Draft of the Declaration of Independence (1776)

Report on Government for Western Territory (1784)

Notes on the State of Virginia (1785)

Personal Letters (1775-1786)

Observations on the Whale Fishery (1788)

Plan for Coinage, Weights, and Measures (1790)

Opinion on the Constitutionality of a National Bank (1791)



# Jefferson Corpus

Opinion on the French Treaties (1793)

Report on Commerce of the U.S. in Foreign Countries (1793)

Draft of the Kentucky Resolution (1798)

Inaugural Addresses (1801, 1805)

Draft on an Amendment to the Constitution (1803)

Indian Addresses (1781-1806)

Messages to Congress (1801-1808)

Autobiography (1821)

Reports to Directors of the UVA Literary Fund (1822-1825)

Draft Declaration and Protest of Virginia (1825)

# Corpus of Possible Authors

After splitting the texts by letters and chapters wherever possible and removing any text under 200 words as well as a small number of extreme outliers, the Dickinson corpus contained **55 texts** totalling **97,948 words**, and the Jefferson corpus contained **187 texts** totalling **226,273 words**.

# Linguistic Variable Selection

To identify stylistic differences between the two authors, 668 linguistic variables commonly used in quantitative authorship attribution (Grieve, 2007) were measured across the two possible author corpora.

# Linguistic Variable Types (normalized)

Word Frequency (154 Variables)

Two Word Sequence Frequency (157)

Sentence Initial (25) and Final (3) Word Frequency

Part-of-Speech Frequency (32)

Two POS Sequence Frequency (277)

Average Length Measures (3)

Vocabulary Richness Measures (7)

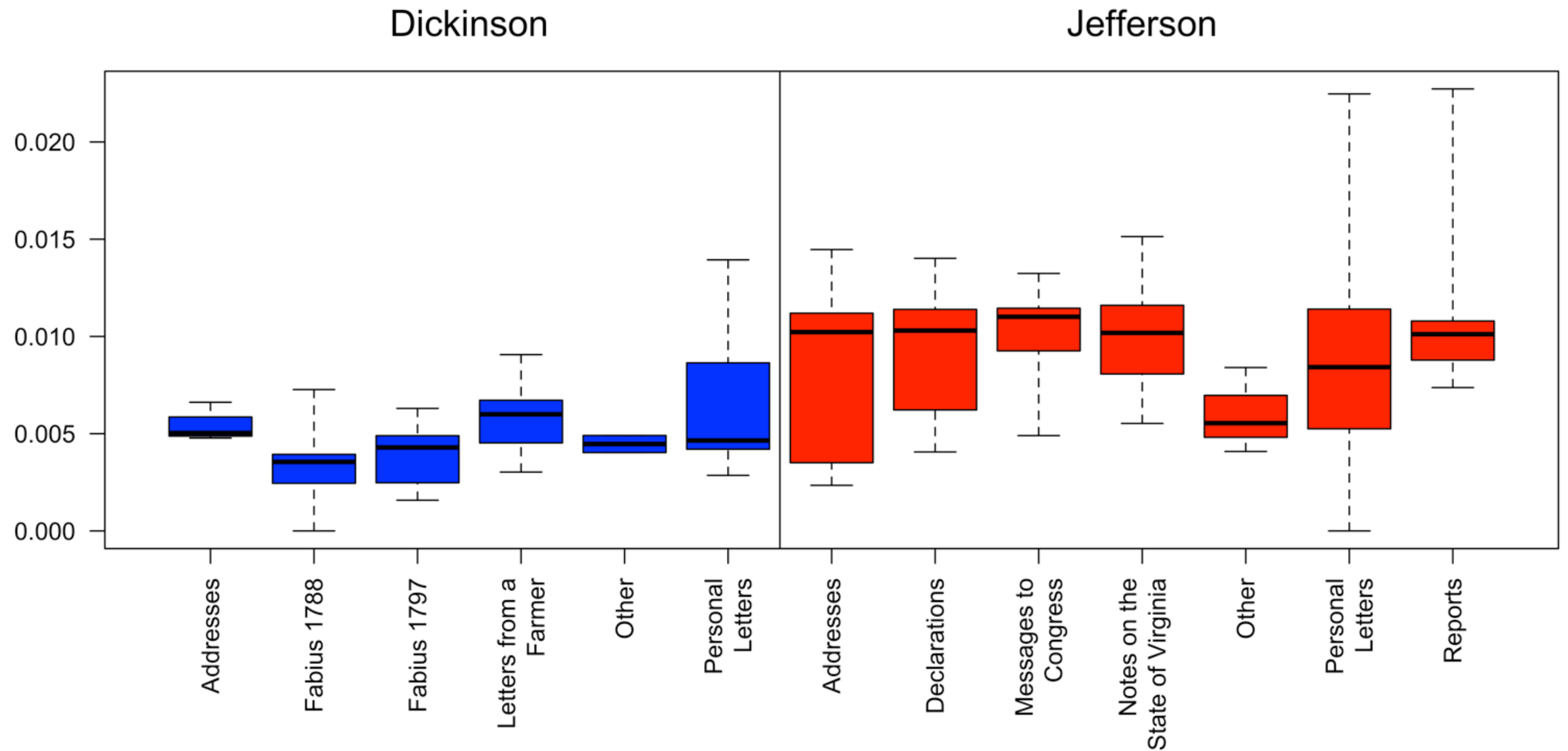
Punctuation Frequency (11)

# Identification of Distinctive Features

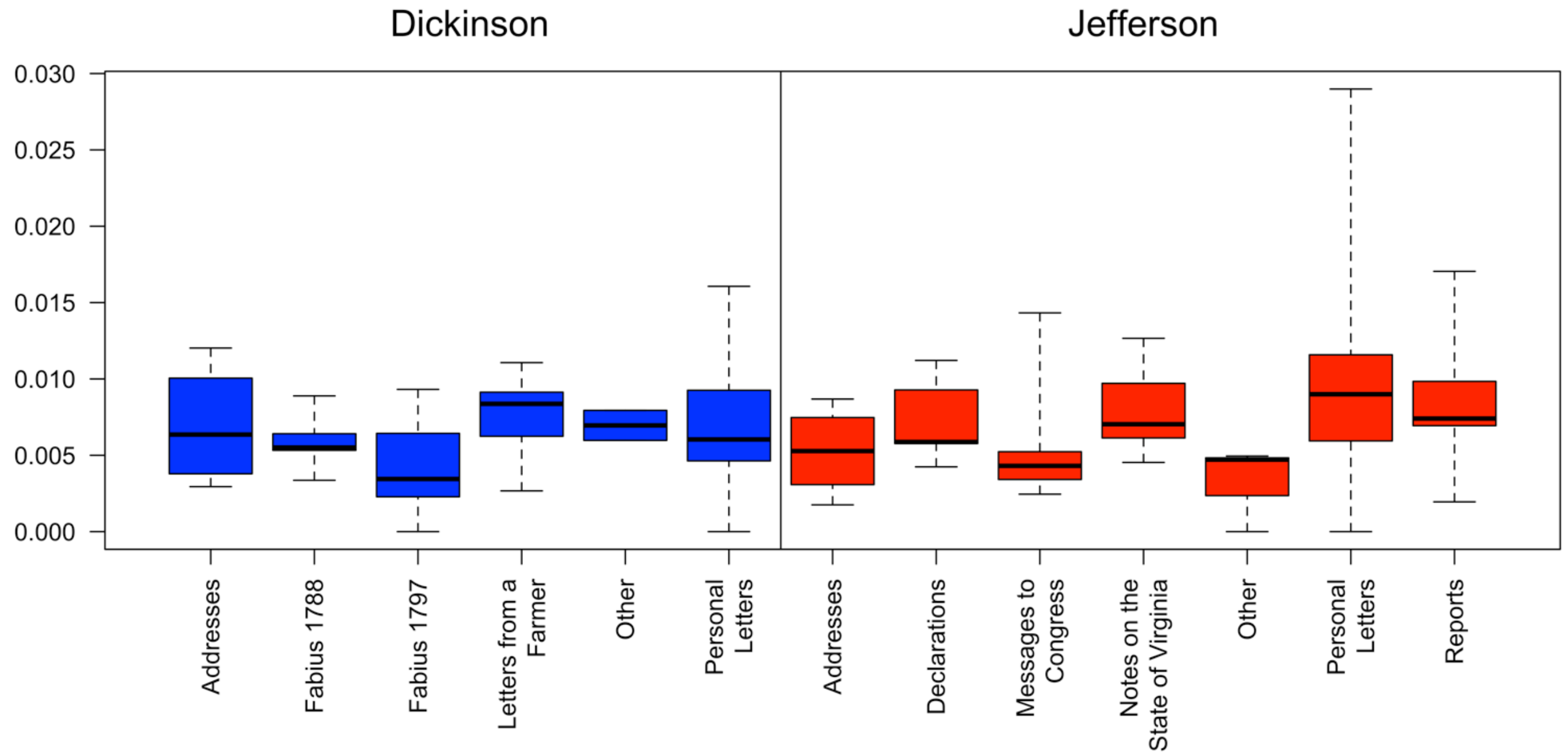
Boxplots were generated showing the values of each variable measured across the two authors and the registers in which they wrote.



# *Which* Frequency



# *This Frequency*



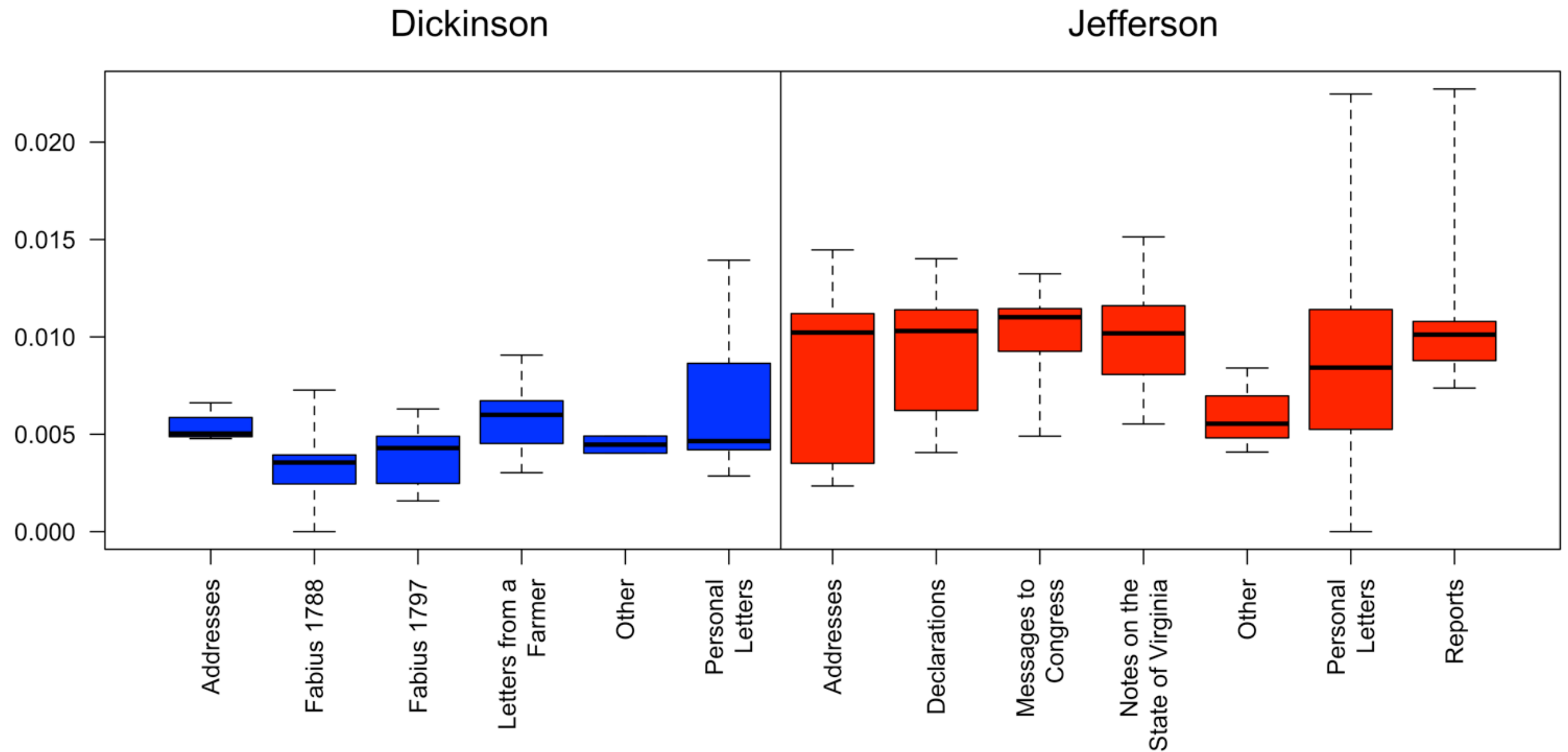
# Identification of Distinctive Features

The values of each variable were also compared across the major political writings of Jefferson\* and Dickinson\*\* using a Wilcoxon rank sum test.

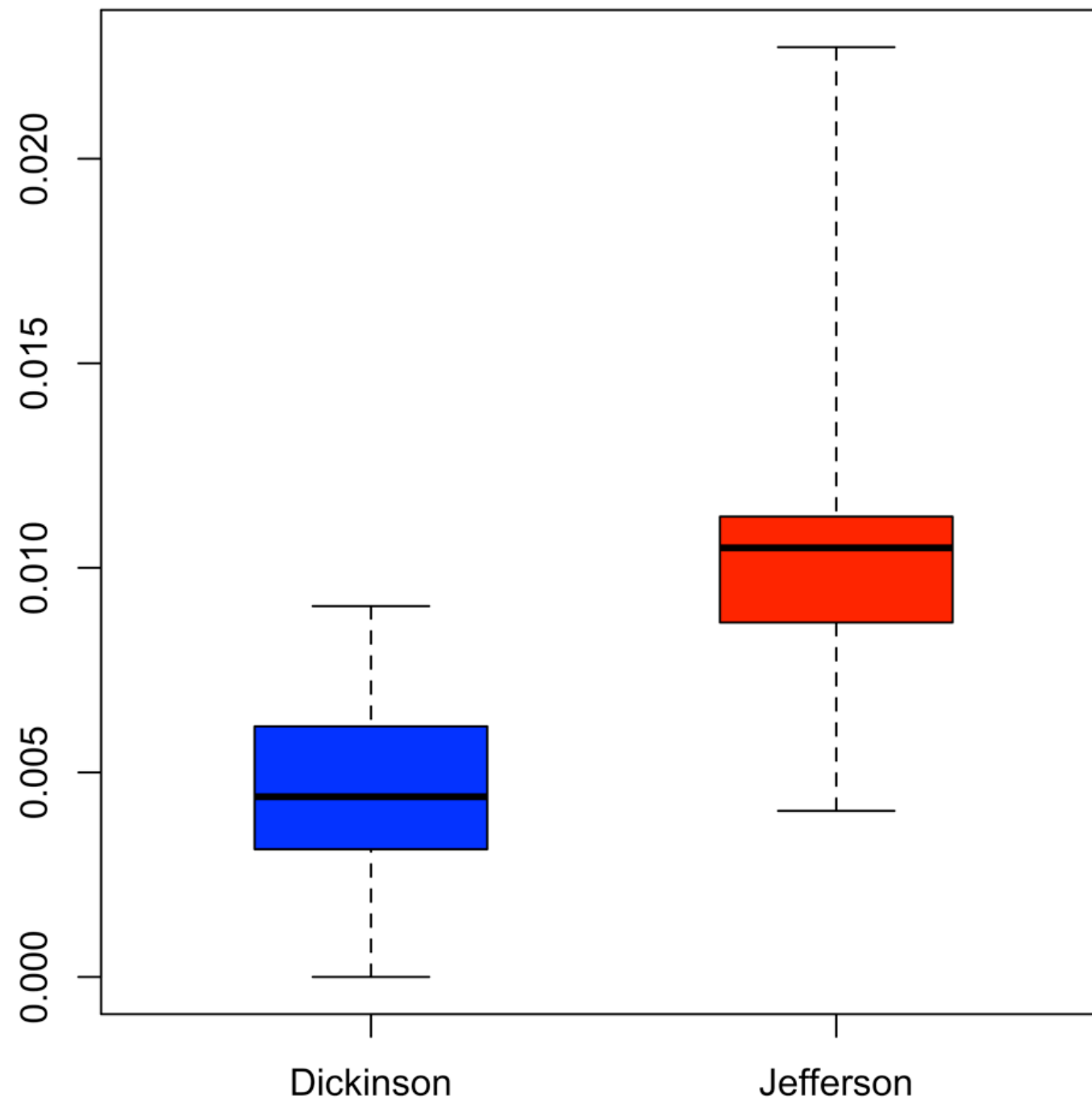
\* *Declarations, Messages to Congress, Reports*

\*\* *Fabius 1788 + 1797, Letters from a Farmer, Late Regulations, Constitutional Power of Great Britain*

# *Which* Frequency



# *which* Frequency in Political Writings





# Identification of Distinctive Features

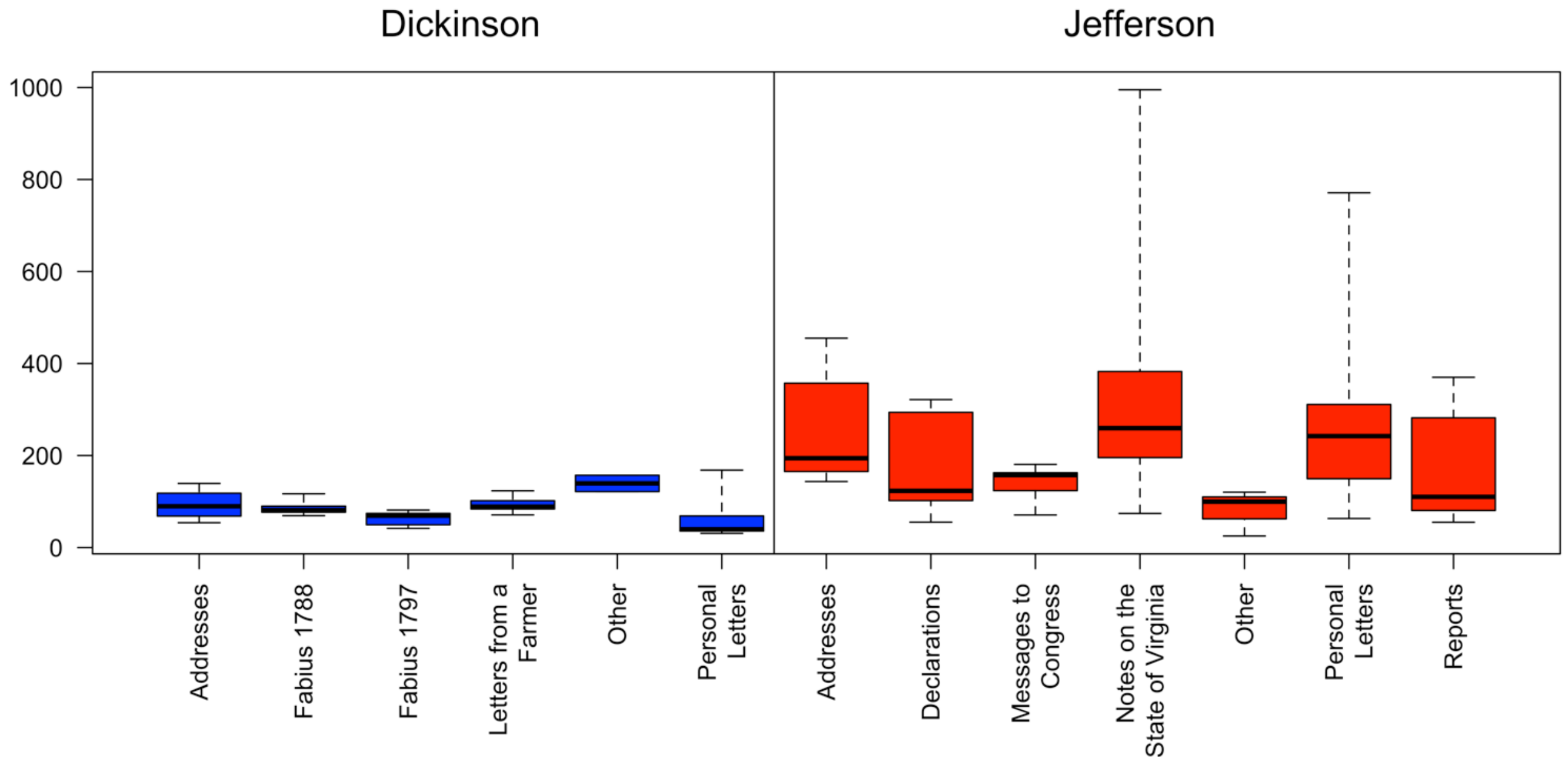
With significance capped at  $(.05/668 = ) p < .000075$ , the Wilcoxon rank sum analysis identified 24 out of the 668 linguistic variables whose values significantly differentiate between the writing styles of Dickinson and Jefferson.

# 24 Final Features

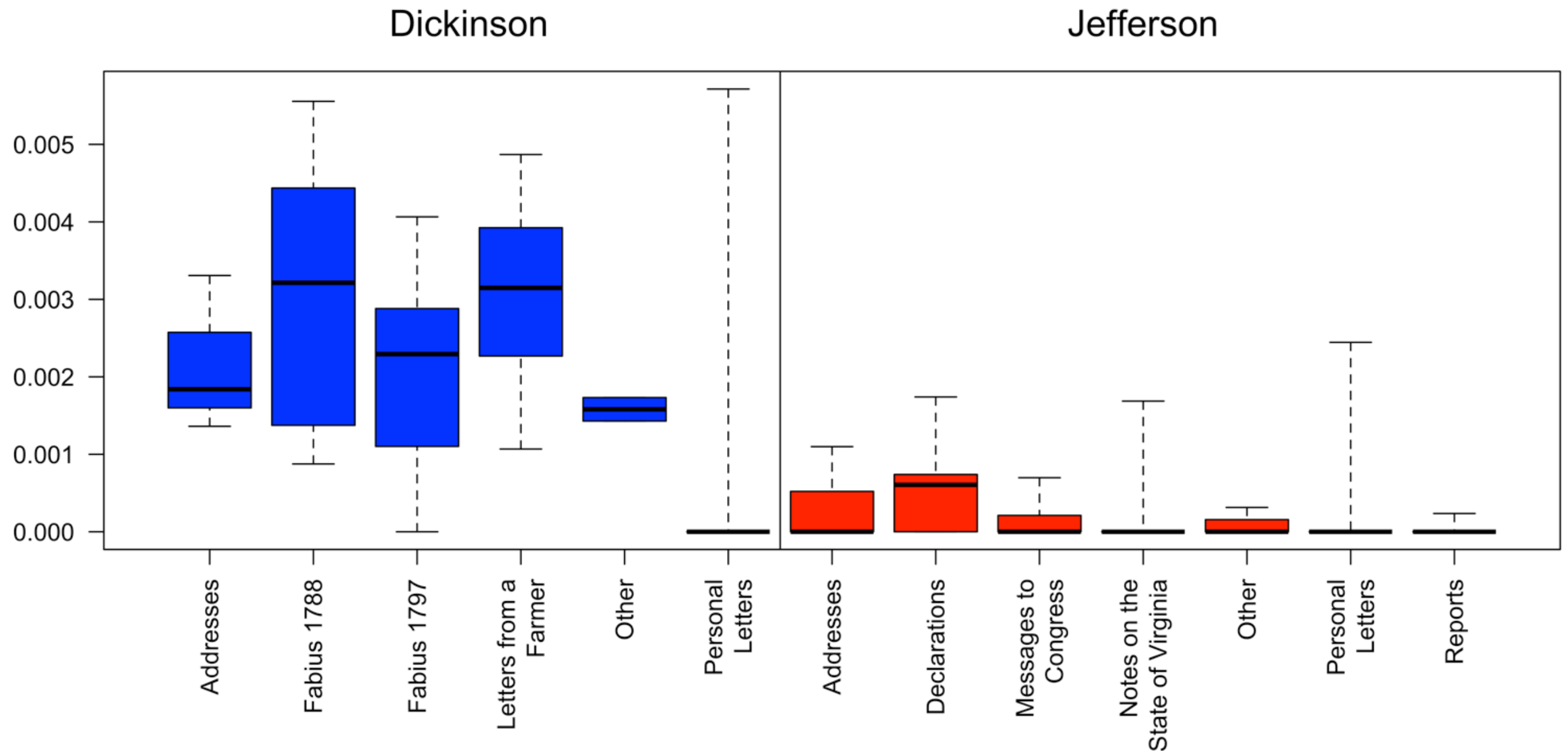
<i>during</i>	Existential <i>there</i>
<i>if</i>	Comma
<i>of</i>	Dash
<i>upon</i>	Double Quote
<i>which</i>	Question Mark
<i>within</i>	Sentence Length
<i>and of</i>	Paragraph Length
<i>of the</i>	

Sentence Initial *if*  
Sentence Initial *what*  
Prep./Subord. + Determiner  
Prep./Subord. + Singular Noun  
Singular Noun + Coordinator  
Singular Noun + Prep./Subord.  
Plural Noun + Prep./Subord.  
Adverb + Adjective  
Relative Pronoun + Modal

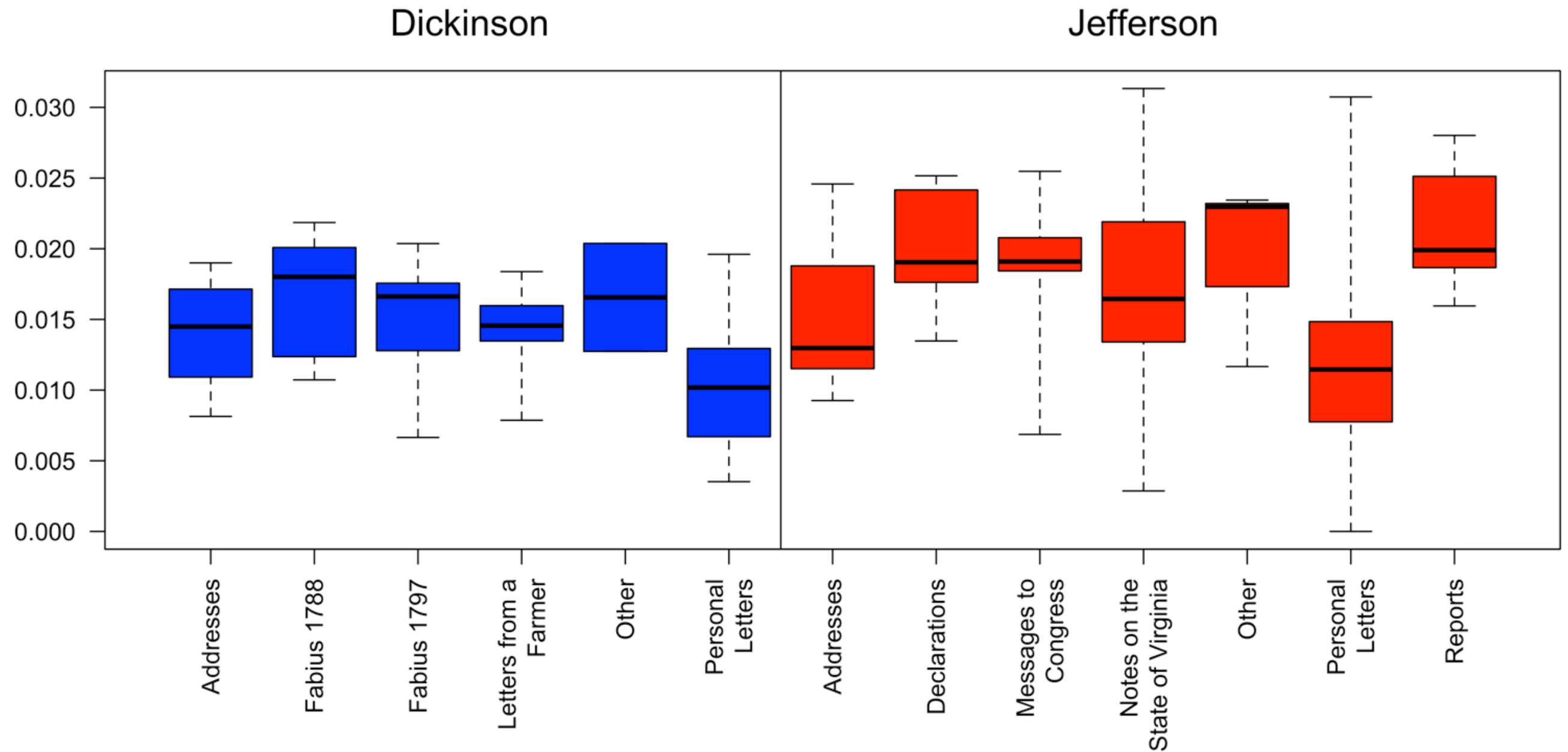
# Average Paragraph Length



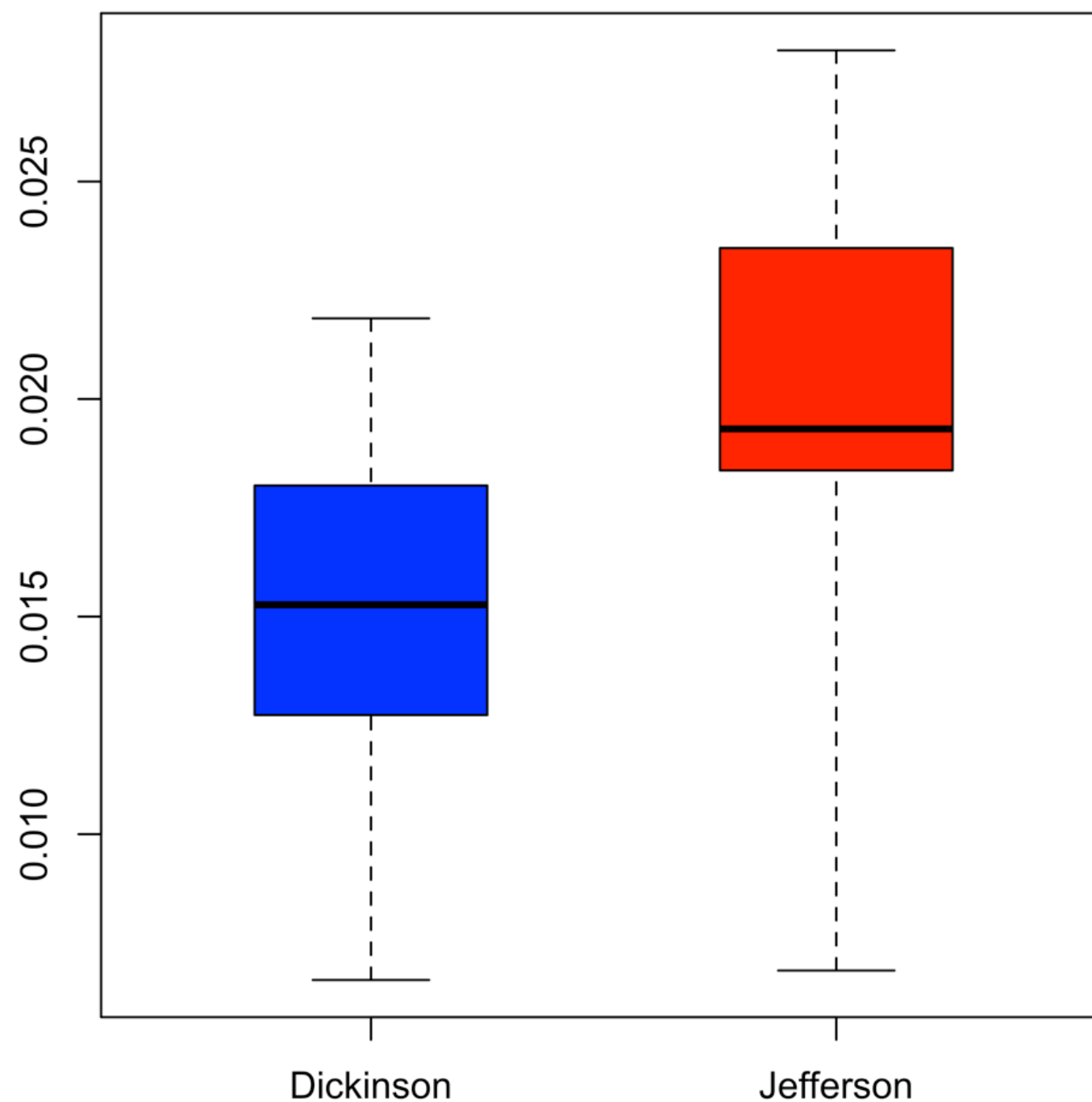
# *upon* Frequency



# Preposition + Noun Frequency



# Preposition + Noun in Political Writings



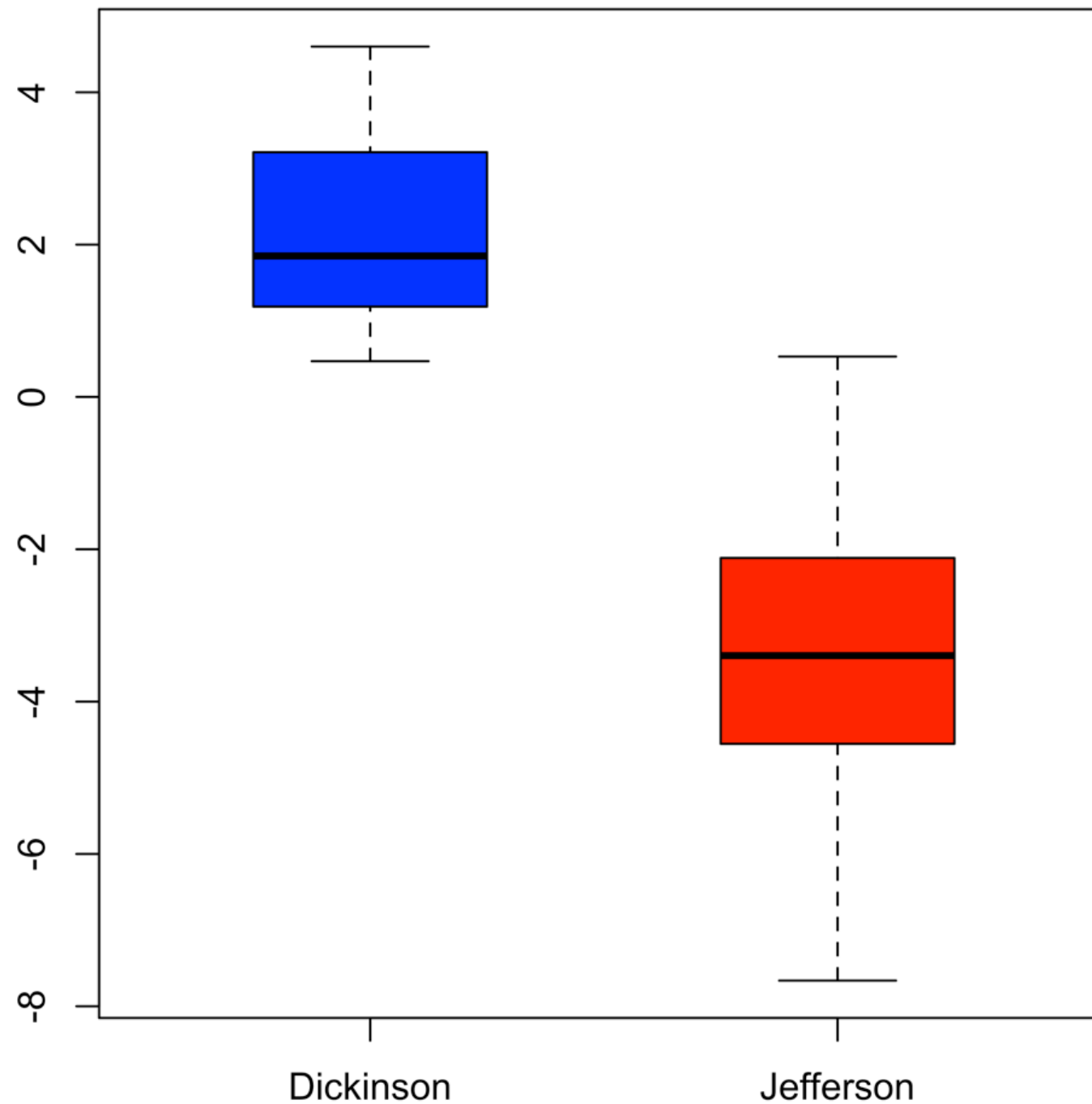


# Aggregation

In order to generate a single classifier of authorship, the 24 linguistic variables (measured across the political writings) were subjected to a principal component analysis.

The first principal components loads all 24 variables and clearly distinguishes between the two authors.

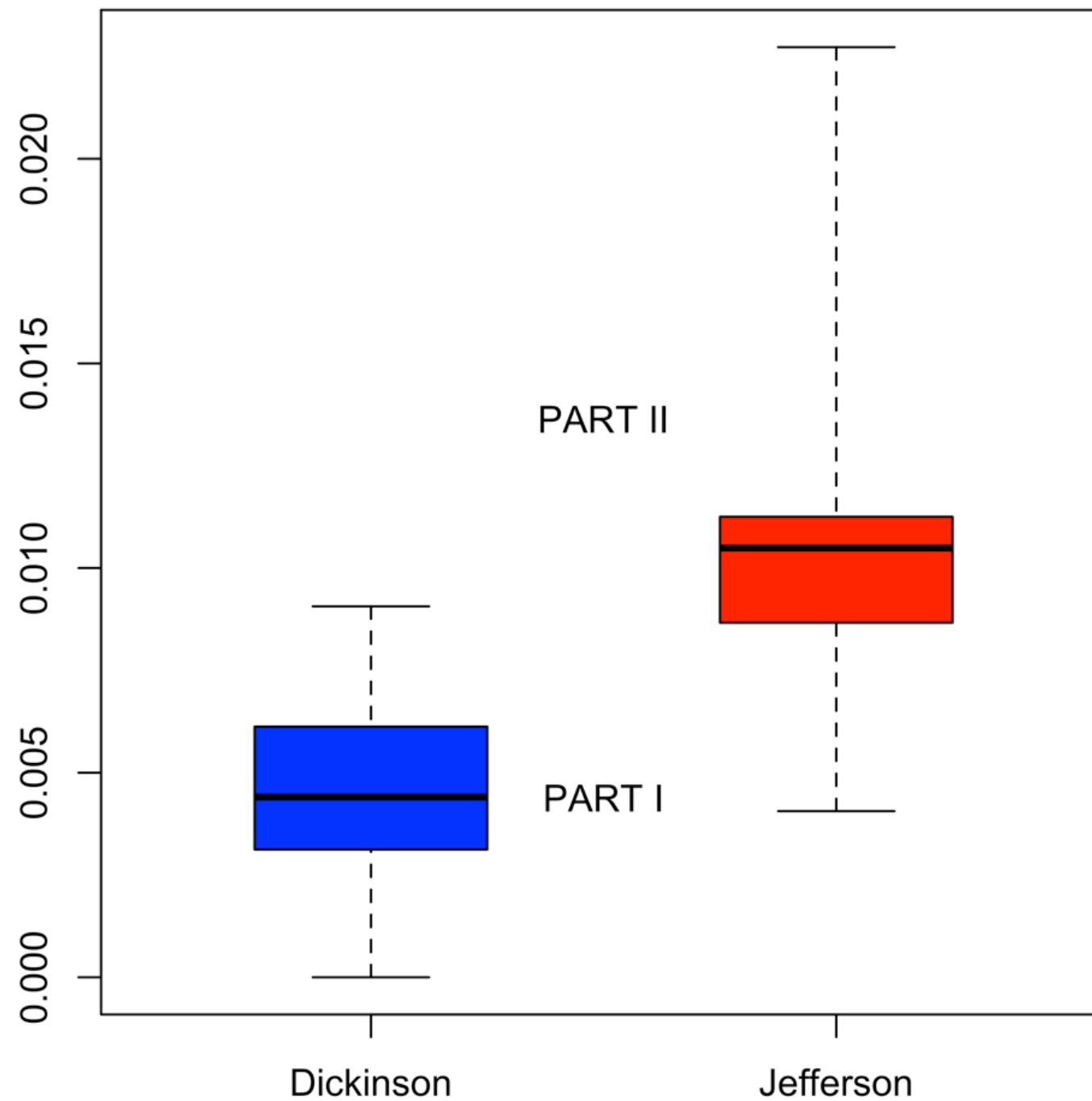
# Principal Component 1



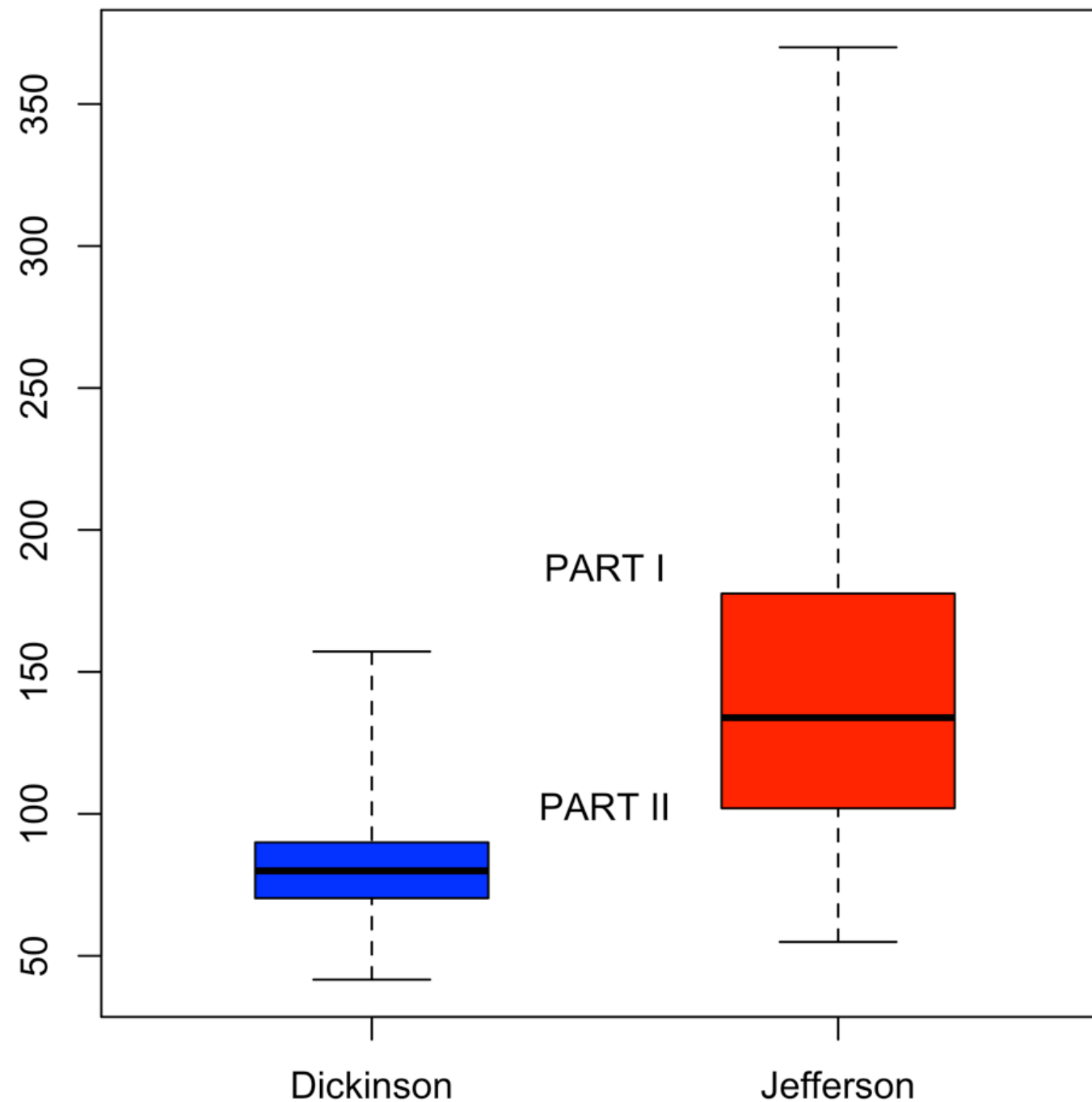
# Attribution

To attribute the text, the two parts of the Declaration were plotted against the Dickinson and Jefferson corpora for the 24 significant linguistic variables as well as the first principal component.

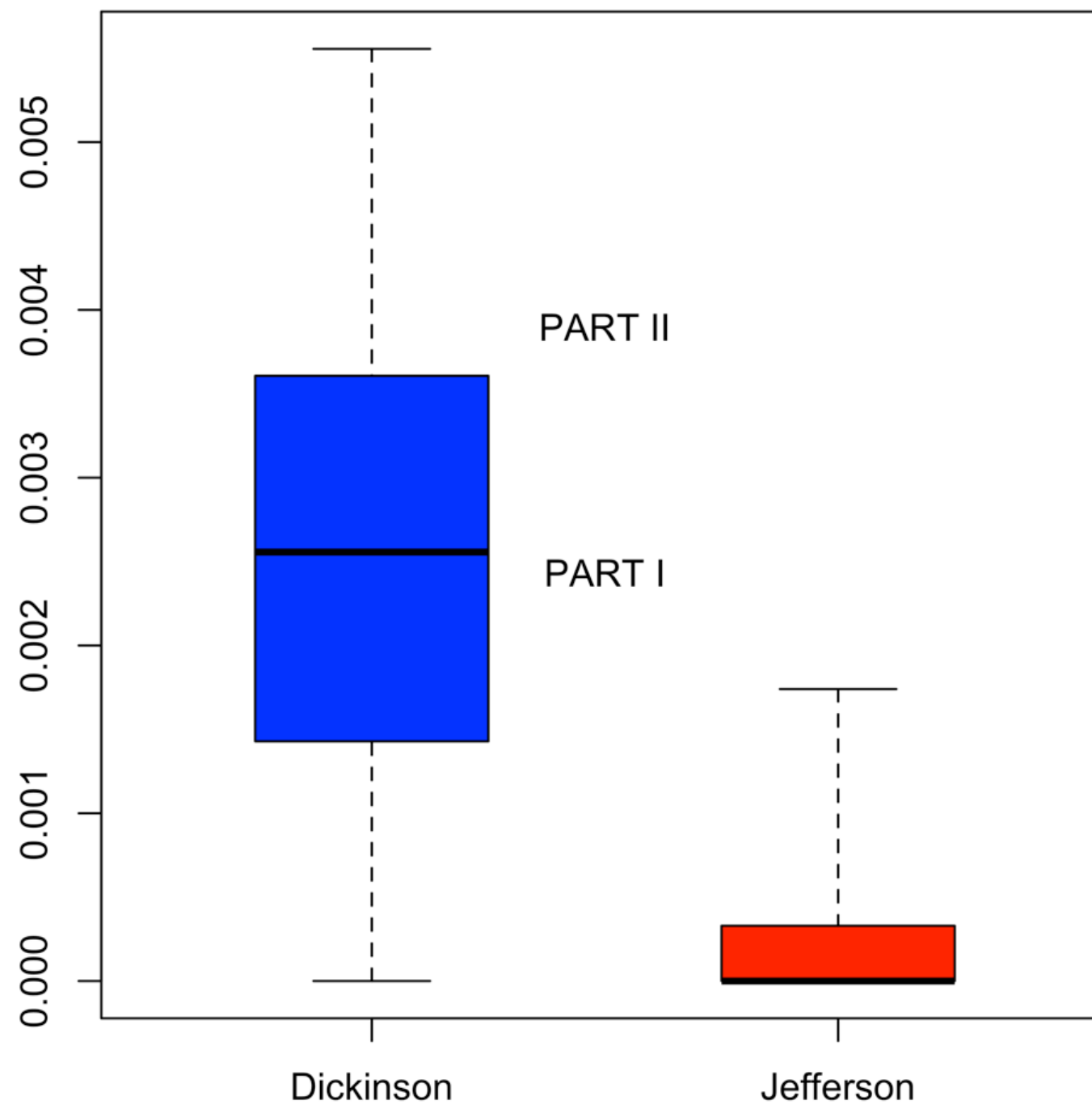
# *which* Frequency



# Average Paragraph Length

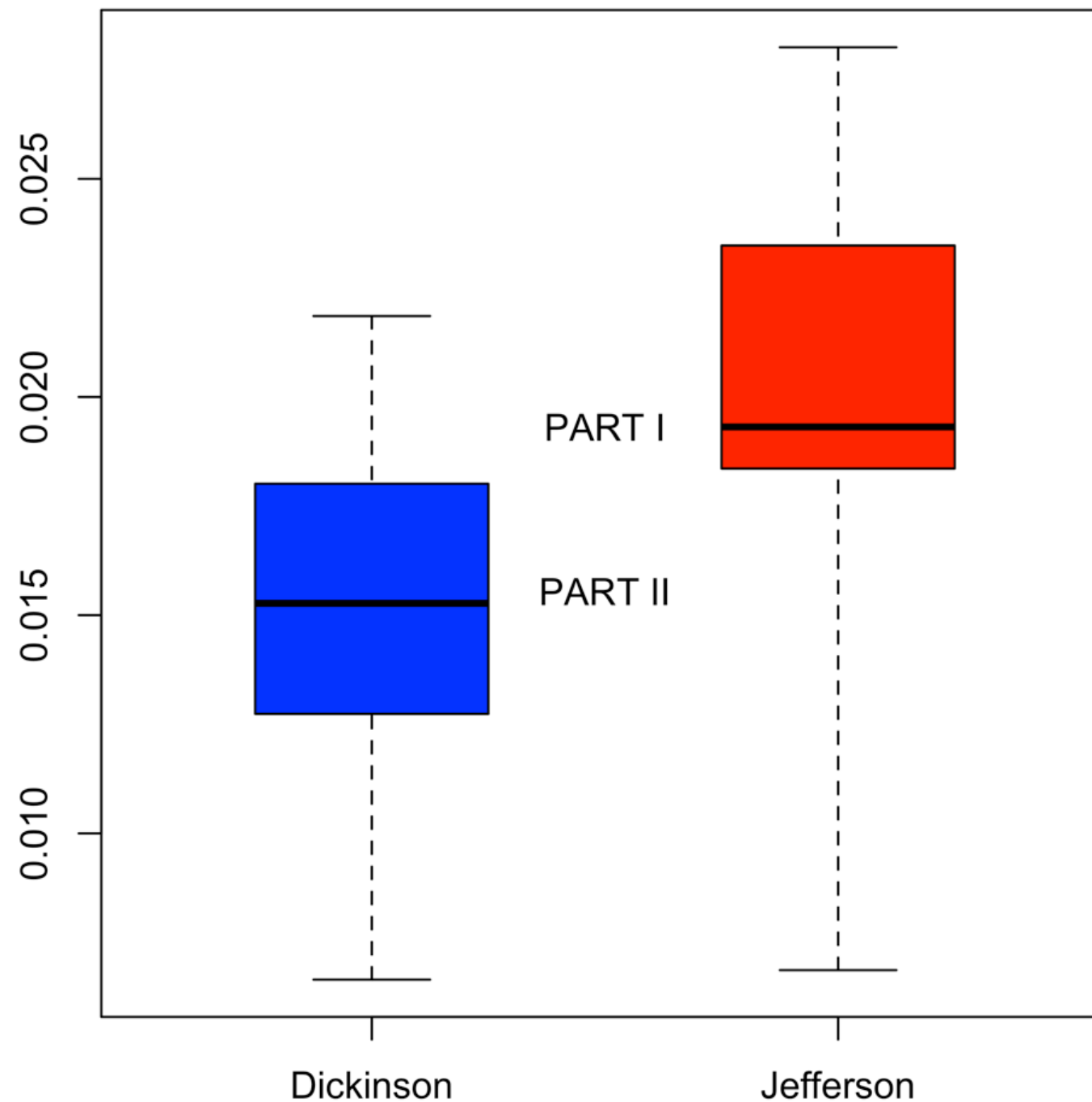


# *upon* Frequency





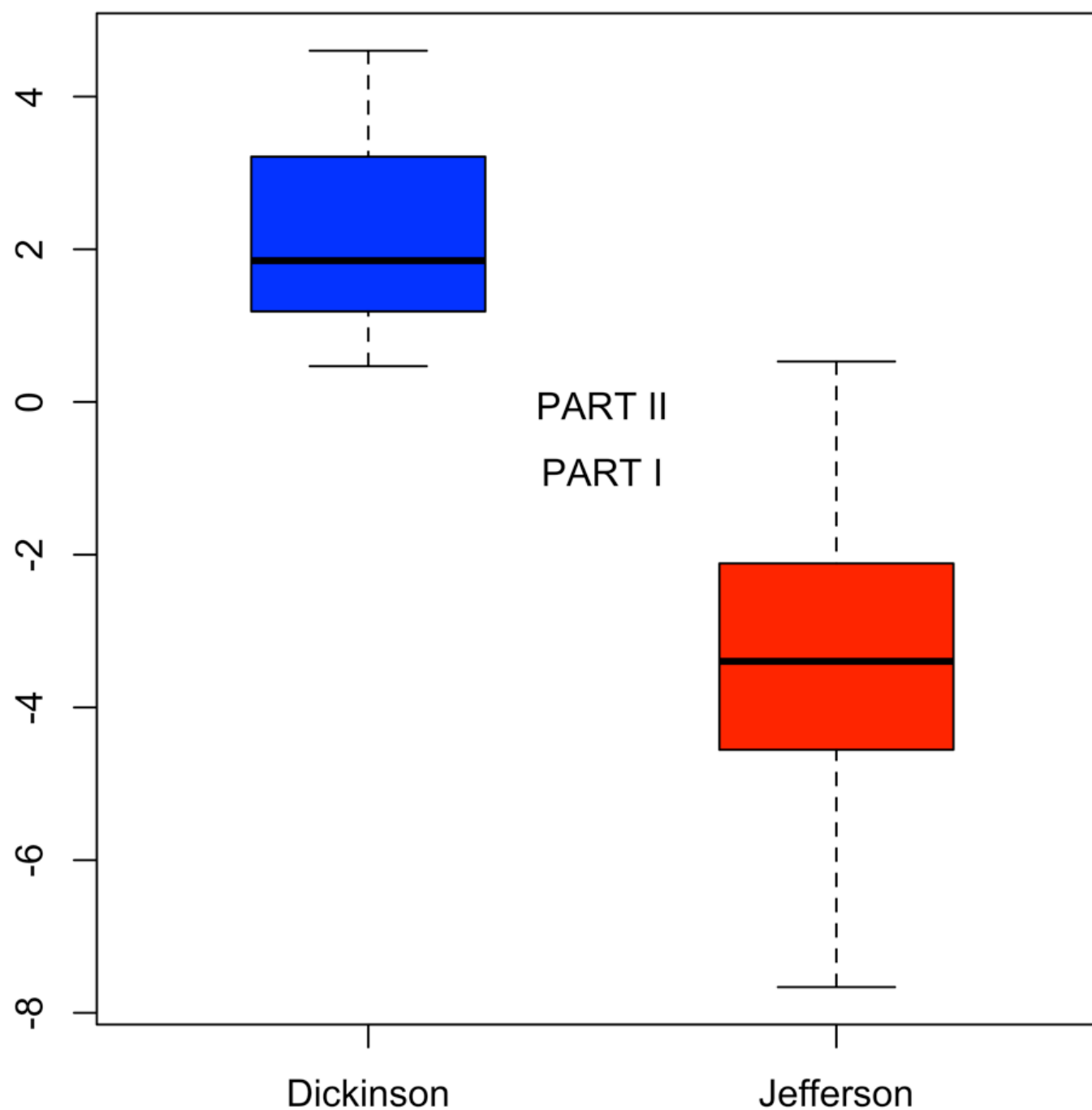
# Preposition + Noun Frequency



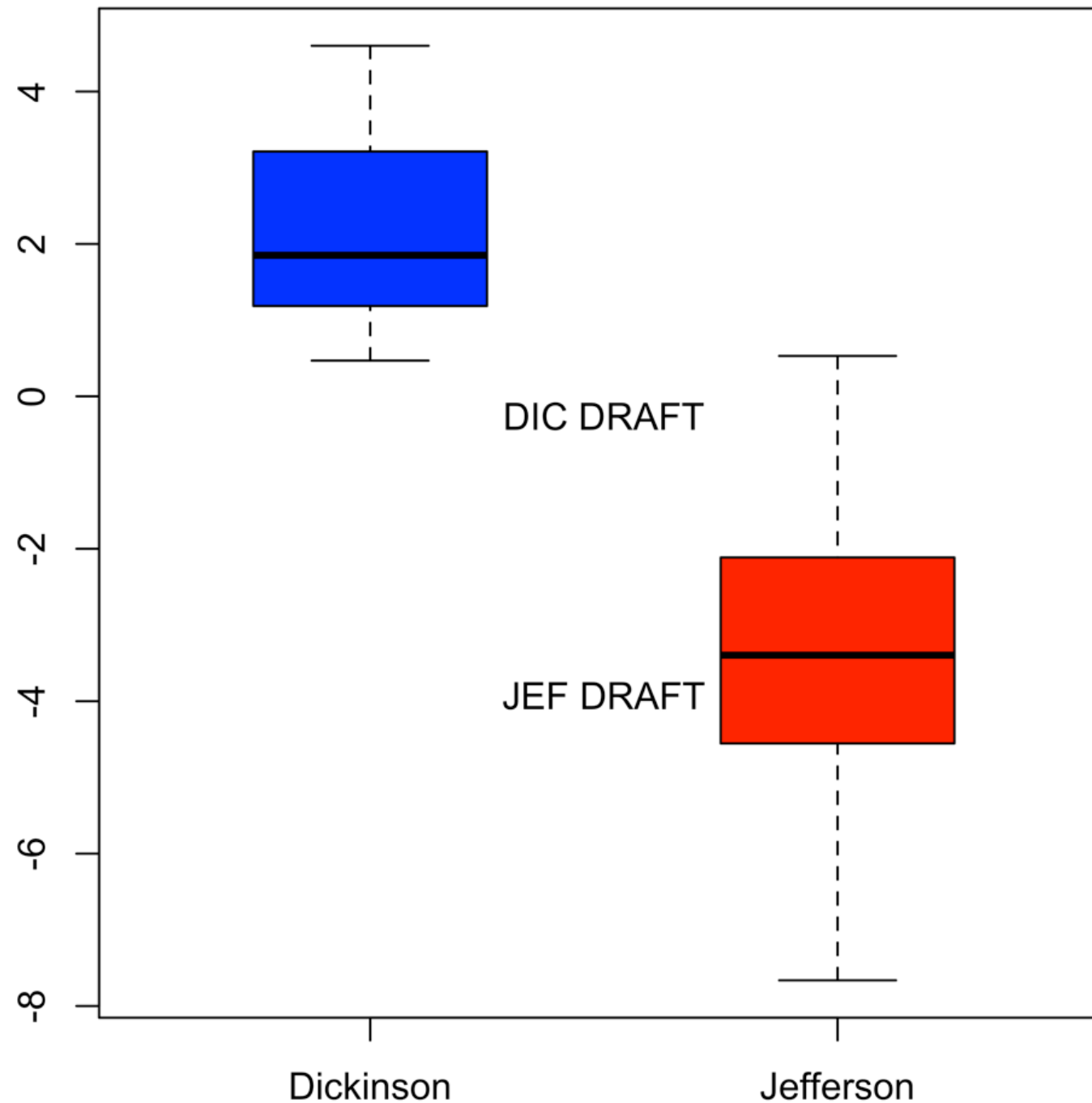
# Variable Summary

VARIABLE	PART I	PART II
Dash		
which		
upon		
Singular Noun + Preposition		
of		
Sentence Length		
Question Marks		
Preposition + Determiner		
Quotation Mark		
Comma		
Existential There		
Sentence Initial what		
Adverb + Adjective		
Paragraph Length		
Relative Pronoun + Modal		
and of		
of the		
if		
Sentence Initial if		
Preposition + Singular Noun		
within		
Noun + Coordinating Conjunction		
Plural Noun + Preposition		
during		

# Principal Component 1



# Principal Component 1: Drafts



# Hypotheses of Authorship

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Entirely by Dickinson	Dickinson Volume (1801), Bancroft (1891) Standard Early 20 <sup>th</sup> Century Attribution
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Primarily by Dickinson	Boyd (1950) Standard Modern Attribution
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Closing by Jefferson	Jefferson (1821), Parton (1874) Standard 19 <sup>th</sup> Century Attribution
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Primarily by Jefferson	Jefferson's Note
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Primarily by Jefferson	Jefferson's Note
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# Jefferson's Note

“On a meeting of the commee, J. Dickinson objected that it was too harsh, wanted softening, &c. whereupon the comme desired him to **retouch** it, which he did in the form which they reported July 6, which was adopted by Congress.”

# Jefferson's Autobiography

“We therefore requested him to take the paper, and put it into a form he could approve. He did so, preparing an entire new statement, and preserving of the former only the last 4 paragraphs & half of the preceding one.”

# Dickinson's Reputation Post-1776

Because he had refused to sign the Declaration of Independence, Dickinson was seen by many as a traitor.

His reputation was undeniably repaired to some degree by claiming credit for the Declaration.

# Jefferson to Bringham (Feb. 16, 1808)

“a more estimable man, or truer patriot, could not have left us. among the first of the advocates for the rights of his country when assailed by Great Britain. [...] his name will be consecrated in history as one of the great worthies of the revolution.”

(source: <http://www.lib.udel.edu/ud/spec/guides/jefferson>)

# Jefferson to Adams (August 22, 1813)

“Of the papers of July 1775, I recollect well that Mr. Dickinson drew the petition to the King, ib. 149; I think Robert R. Livingston drew the Address to the Inhabitants of Great Britain, ib. 152. Am I right in this?”

# Conclusions

Jefferson was the primary author of the Declaration of the Causes and Necessity of Taking Up Arms, as he claimed in the note on the back of his second draft.

Presumably Jefferson did not take full credit for the Declaration in his Autobiography so as not to further damage Dickinson's reputation.

# Acknowledgements

We would like thank Jane E. Calvert, director of the John Dickinson Writing Project at the University of Kentucky, Jim Gerencser at Dickinson College, and the Avalon Project at Yale for providing much of the data upon which this analysis was based.



# The Authorship of the Declaration of the Causes and Necessity of Taking Up Arms

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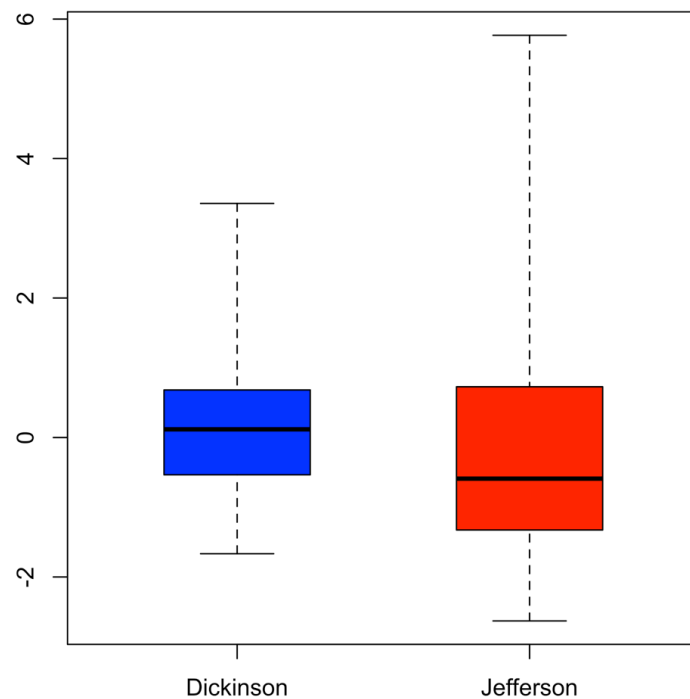
# Jefferson to Dickinson (March 6, 1801)

“Dear Sir,

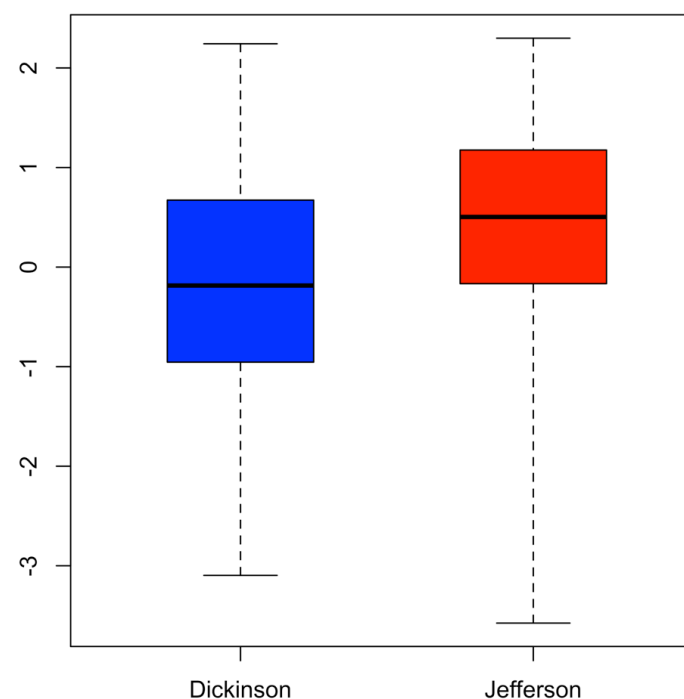
No pleasure can exceed that which I received from reading your letter of the 21st ultimo. It was like the joy we expect in the mansions of the blessed, when received with the embraces of our forefathers, we shall be welcomed with their blessing as having done our part not unworthily of them.”

# Principal Components 2-4

## Component 2



## Component 3



## Component 4

