Publius: Digital Intertextuality and Modern Exemplarity in *The Federalist Papers**

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Abstract

What role might large language models (LLMs) play in facilitating understanding of classical exempla and their reference in modern texts? This project explores the possibility of LLMs in assisting the educational work of analyzing modern texts and their relation to classical works, focusing on *The Federalist Papers* as a case study. Toward this goal, I develop and evaluate *Publius* (https://publius.pythonanywhere.com), an LLM-augmented digital reader for all eighty-five papers, to assist in the tasks of exempla exploration and analysis. I find that LLMs, if deployed thoughtfully and with sufficient context, offer a promising starting point for provoking discussion about exemplarity.

1 Introduction

The field of digital humanities (and in particular, digital classics) has had a long and storied history of leveraging new technologies in service of advancements in the field. Projects in this vein include the Perseus Digital Library, the Latin Library, and the Tesserae Project, many of which have grown over time into valuable tools for learning and engaging with the classics. Indeed, rising capabilities in computational power, highly-structured corpora, and a rich legacy of commentary on these texts make the field of digital classics an exciting area for new technologies and techniques.

Moreover, in the past few years, the explosive growth in artificial intelligence (AI), specifically large language models (LLMs).⁵ has sought to reshape funda-

^{*}The code for this project has been open-sourced and is accessible at the following GitHub repository: https://github.com/flxcn/publius.

[†]I would like to thank Professor Love for providing the opportunity for this project's ideation and development, and for her insightful feedback, particularly at the earliest stages of this project.

^{1.} Joel P Christensen, "Digital Classics," TAPA (Society for Classical Studies) (Baltimore) 152, no. 1 (2022): 43–54, ISSN: 2575-7180, https://doi.org/10.1353/apa.2022.0005.

 $^{2.\} Perseus\ Digital\ Library, \ https://www.perseus.tufts.edu/hopper/,\ accessed\ May\ 1,\ 2025.$

^{3.} The Latin Library, https://www.thelatinlibrary.com/, accessed May 2, 2025.

^{4.} About | The Tesserae Project, accessed May 2, 2025.

^{5.} A point of clarification: in this article, I use the terms LLM and AI more or less interchangeably, but it is important to note that LLMs represent only a subset of AI tools, and that many traditional digital classics employ machine learning or rule-based systems for

mental aspects of education, work, and labor. While there has been considerable exploration of its potential for increasing productivity in the workforce (e.g., in coding and programming tasks), there has been less attention directed toward the potential application of LLMs toward the work of the humanities.

This project seeks to build on the recent growth in LLMs and the deep foundations of digital classics to link a modern set of texts, *The Federalist Papers*, to a broad array of influential classical texts. In particular, I chose to narrow the focus of this project to the question of exemplarity and the relevance and usage of exempla. Drawing heavily from Roller's general model of exemplarity,⁶ Publius's AI-augmented approach is centered around the conceptual framework of exemplary operations—action, evaluation, commemoration, and norm setting—to structure responses for the user. The purpose of this project is therefore to examine and evaluate the promise of LLMs toward this learning objective.

In the remainder of this article, I outline the process of constructing Publius and explain and defend some of the design decisions. Next, I highlight usage and testing of this tool and some preliminary results. I conclude by identifying areas of future work along with limitations inherent to this approach.

2 Methodology

In this section, I highlight the many aspects involved in the construction of Publius. I begin with an outline of the tools I utilize, then elaborate on the knowledge base chosen for the model, and lastly explain the system prompt design.

2.1 Tools

To build Publius, I chose between a number of LLMs such as OpenAI's Chat-GPT and Google's Gemini, ultimately deciding to use Anthropic's Claude 3 Opus (claude-3-opus-20240229) model based on the quality of its responses and efficiency of its cost per token.⁷ For this work, the Harvard AI Sandbox proved to be valuable in testing and iterating on various approaches.⁸

For the frontend—that is, the web interface for users to interact with the texts and the LLM—I chose to use Flask, a Python framework, for flexibility and portability. The code itself is hosted on Anaconda's PythonAnywhere platform. ¹⁰

parsing and analyzing classical texts.

^{6.} Matthew B. Roller, "Introduction: The Work of Examples," in *Models from the Past in Roman Culture* (2018), 1–31, ISBN: 978-1-316-61490-7.

All Models Overview, https://docs.anthropic.com/en/docs/about-claude/models/all-models, accessed May 10, 2025.

 $^{8.\} AI Sandbox / Harvard University Information Technology, \\ \text{https://www.huit.harvard.edu/ai-sandbox, accessed May 1, 2025.}$

^{9.} Welcome to Flask — Flask Documentation (3.1.x), https://flask.palletsprojects.com/en/stable/, accessed May 1, 2025.

^{10.} See https://www.pythonanywhere.com/

2.2 Knowledge Base

2.2.1 The Federalist Papers

The first step of constructing the knowledge base involved selecting which version of the Federalist Papers to use for Publius. There are a number of digital versions available, with the Library of Congress offering the series of texts collated in pages of ten papers each, ¹¹ and Project Gutenberg offers digital versions in many media formats (audio, text, etc.). ¹² Ultimately, I chose to leverage a JSON version derived from Project Gutenburg as cleaned and formatted by Patrick O. Perry at the NYU Stern School of Business. ¹³ The JSON format was not properly validated, so I had to additionally write my own script to make it suitable for use—a modified version of this file therefore powers the corpus accessible to users of Publius. This dataset contains information on the title of each paper, the authorship if available (though originally all three authors all wrote under the *nom de plume* "Publius"), the venue in which it was published, the date on which it was published, and the full contents of each paper.

2.2.2 Classical References

The next design decision involved determining which classical texts to reference as part of the knowledge base. To this end, Carl J. Richard's *The Founders and the Classics: Greece, Rome, and the American Enlightenment* proved to be valuable. ¹⁴ As Richard writes,

The founders' models of personal behavior included mythological figures, Athenians, and Romans. The founders met their mythological heroes in the works of Homer, Hesiod, Virgil, and Ovid. They found their Athenian heroes in Herodotus, Thucydides, Xenophon, and especially Plutarch... The founders encountered their Roman heroes in the works of Polybius, Livy, Sallust, Plutarch, and Tacitus. Thomas Jefferson particularly admired Tacitus, whose moralistic *Annals* heaped scorn on the emperors and glorified the republic.¹⁵

Drawing on the list of classical texts that the Founding Fathers of the American Revolution were likely to exposed to, I compiled a set of authors and works that ought to be referenced by the LLM in Publius to generate a response to the user. To do so, I initially explored the usage of a Retrieval Augmented Generation (RAG) approach, ¹⁶ but the compilation of the entire corpora in a standardized manner across all authors proved to be out of the scope of this project.

^{11.} Ken Drexler, Research Guides: Federalist Papers: Primary Documents in American History: Full Text of The Federalist Papers, https://guides.loc.gov/federalist-papers/full-text, Research Guide, accessed May 1, 2025.

^{12.} Alexander Hamilton, John Jay, and James Madison, *The Federalist Papers* (September 2007), accessed May 5, 2025.

^{13.} Patrick O. Perry, Case Study: The Federalist Papers, https://ptrckprry.com/course/ssd/lecture/federalist.html, accessed April 21, 2025.

^{14.} Carl J Richard, The Founders and the Classics: Greece, Rome, and the American Enlightenment (Cambridge, Mass.: Harvard University Press, 1994), ISBN: 0-674-31425-5.

^{15.} Richard, 53-54.

^{16.} Yunfan Gao et al., Retrieval-Augmented Generation for Large Language Models: A Survey, arXiv:2312.10997, March 2024, accessed May 2, 2025, https://doi.org/10.48550/arXiv.2312.10997, arXiv: 2312.10997 [cs].

Instead, these authors and their work were incorporated into the prompting design for the Claude model. Thus, references to the crucial authors and works identified by Richard formed a substantive portion of the knowledge base.

2.2.3 Roller's General Model of Exemplarity

Lastly, and perhaps most importantly, Roller's exemplarity approach formed a basis for structuring and linking together the papers to the classical texts, and to respond to them appropriately. Here, I will briefly identify the four operations in the cycle and highlight how they were envisioned as part of the Publius system design.

- 1. **Action.** This operation focuses on the public nature of an action and its relation to a community (or primary audience).¹⁷ This is referenced by Publius in approaching exemplarity by identifying first some specific action that centers discussion.
- 2. **Evaluation.** From the action itself, the audience then offers some evaluation of its significance to the community. ¹⁸ In particular, is the action held up as "good" or "bad?" This is referenced by Publius in introducing the concept of a primary or internal audience and the distinction between negative and positive exempla.
- 3. **Commemoration.** Next, the action itself is commemorated in some manner, through the medium of a "monument." For *The Federalist Papers*, the act of allusion to the action is, I argue, an act of commemoration. Thus, while this does not implicitly factor into the prompting question set, it is implicitly understood as satisfying this component of exemplarity.
- 4. **Norm Setting.** Lastly, the action and accompanying evaluation are disseminated to both primary and secondary audiences.²⁰ Here, there is an opportunity for Publius to offer one interpretation regarding the norms conveyed by an exemplum's inclusion in *The Federalist Papers*.

2.3 Prompt Design

With all three components of the knowledge base, I then implement a prompting approach that satisfies core elements for each. In sum, each Publius prompt integrates (1) the user's selection of The Federalist Papers, (2) a condensed reference of possible classical influences, and (3) Roller's structure of exemplarity to shape the response.

3 Results

In this section, I will offer an overview of the Publius interface, and offer one demonstration of its usage for *Federalist Paper*, No. 18. Though anecdotal, this

^{17.} Roller, "Introduction: The Work of Examples," 5.

^{18.} Roller, 6.

^{19.} Matthew B. Roller, "Introduction: The Work of Examples," in *Models from the Past in Roman Culture* (2018), 6, ISBN: 978-1-316-61490-7. Roller uses this term in a broad sense, as effectively anything that can generate awareness or recollection of the action.

^{20.} Roller, 8.

example aims to illustrate some of the capabilities of such an approach.

3.1 User Interface

3.1.1 Homepage

As shown in Figure 1, users are first directed to a home page, which also serves as an index for the entire collection. Here, they are able to click on a specific paper, or search for exact keyword matches across all of the papers. Information on the number, title, and author is also supplied for each paper.

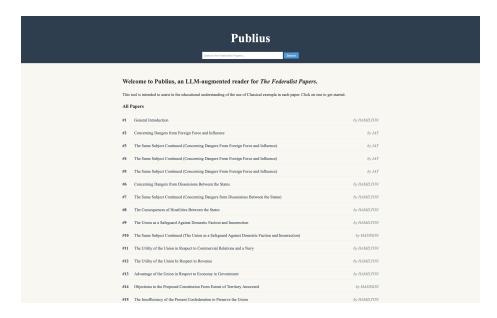


Figure 1: Homepage for Publius, Collection Index

3.1.2 Keyword Search

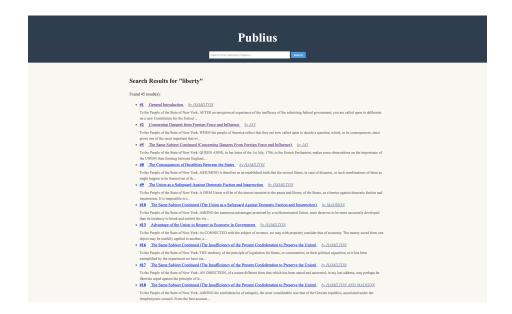


Figure 2: Search results for "liberty" on Publius.

3.1.3 Specific Paper Reader (No. 18)



Figure 3: Paper content for Federalist Paper, No. 18 on Publius.

3.1.4 Analysis Engine

Once users have highlighted a portion of text with their cursor to "select" it, they are able to click the blue button entitled "Capture Selected Text." Once the user clicks the "Analyze" button, Publius will return an exemplarity-oriented explanation of the selected text.

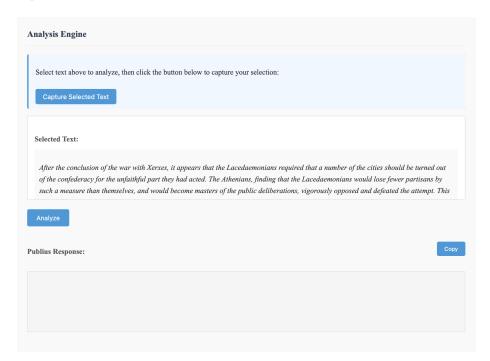


Figure 4: Analysis engine, with Federalist Paper, No. 18 excerpt selected.

3.2 In Action: Federalist Paper, No. 18

To test the quality of the LLM's response and the effects of the prompting structure and knowledge base, I chose to use Publius on *Federalist Paper*, No. 18. In summary, this paper highlights the Achaean constitution to make a point in support of the author's broader arguments. Indeed, Hamilton and Madison refer to this historical event as "an instructive analogy to the present Confederation of the American States."²¹

The Publius analysis is included in full in Appendix A—these initial results are promising. Following the structure of (1) action, (2) evaluation, and (3) norm setting, as outlined by Roller, the response offers a clear and articulate explanation of how the model of exemplarity applies in this specific instance. Regarding the action, the analysis highlights the key failures faced by the ancient Greeks in their governance structures. Regarding evaluation, the analysis

^{21.} Ken Drexler, Research Guides: Federalist Papers: Primary Documents in American History: Federalist Nos. 11-20, https://guides.loc.gov/federalist-papers/text-11-20, Research Guide, accessed May 12, 2025.

appropriately captures how the secondary audience, the authors in this case,²² reflect and pass judgment on the action as a *negative* exemplum. Finally, the norm-setting section of the analysis offers one valid interpretation (in my own reading of the text) regarding the intended effect of this exemplum's usage.

4 Discussion

First, it is important to recognize that the example shown in the Results section is anecdotal in nature. More robust testing ought to be conducted across all of the papers, in order to validate successful distinction of exempla versus other textual content. Moreover, Jay, Hamilton, and Madison make liberal use of allusions to other historical periods and empires, and an expansion to include those references in this analysis could be promising. However, this is still an exciting demonstration that warrants further exploration.

While this conceptual approach that largely focuses on testing the capabilities of LLMs toward analyzing exempla is promising, integration with more traditional approaches to textual analysis is a clear next step. In particular, conducting English to Latin comparison could surface similarities in structure beyond conceptual similarity in the use of exempla.

5 Conclusion

This initial proof-of-concept offers an exciting look at the possibilities of AI-augmented efforts to improve the accessibility of historically significant texts, modern or ancient. The ability to provide additional context and to push the reader toward identifying and drawing connections between texts could provide some overall benefits to making the classics more relatable. Importantly, this tool should be viewed through the lens of assisting readers in their exploration of texts, rather than supplanting their ability to think critically about the underlying meaning and inspiration for these texts. In this spirit, interpretations offered by the LLM represent just one possible discussion of the matter, not a definitive and static understanding of these texts.

^{22.} Notably, the LLM attributes this paper to only James Madison, even though other sources state that both Hamilton and Madison authored this paper.

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Appendix A: Federalist Paper, No. 18. Analysis

This passage from Federalist No. 18, written by James Madison, discusses the ancient Greek confederacies, particularly the Amphictyonic Council and the Achaean League, as historical examples to illustrate the weaknesses of confederate governments and the importance of a stronger union among the American states.

- 1. Action: The central events being discussed are the failures of the Amphictyonic Council and the Achaean League, two ancient Greek confederacies. These confederacies were formed to promote cooperation and common welfare among their member states. However, they ultimately failed due to internal conflicts, power imbalances, and external interference. This discussion relates to the primary audience of the Federalist Papers, the American public, as it serves as a warning about the potential dangers of a weak confederacy and the need for a stronger federal government.
- 2. Evaluation: Madison presents the failures of these Greek confederacies as cautionary tales, highlighting the negative consequences of their weaknesses. He emphasizes how the more powerful member states dominated the weaker ones, leading to internal strife and eventual dissolution of the unions. Madison also points out how external powers, such as Macedon and Rome, exploited these weaknesses to conquer and subjugate the Greek states. By presenting these outcomes as undesirable, Madison implies that the current structure of the Articles of Confederation is inadequate and that a stronger federal government, as proposed by the Constitution, is necessary to prevent similar failures.
- 3. Norm Setting: By including these historical examples in the Federalist Papers, Madison seeks to establish the norm that a strong, unified federal government is essential for the stability, security, and prosperity of the United States. He argues that without a more robust central authority, the American states risk falling into the same patterns of internal discord, external vulnerability, and eventual collapse that befell the Greek confederacies. This inclusion reinforces the idea that the proposed Constitution, with its stronger federal government, is a necessary step forward for the young nation.

Historical Context: The Federalist Papers were written in 1787-1788 to promote the ratification of the United States Constitution. At the time, the United States was governed by the Articles of Confederation, a loose agreement among the states that provided for a weak central government. Many of the Founding Fathers, including Madison, believed that this arrangement was insufficient to ensure the long-term stability and success of the nation. By drawing parallels between the weaknesses of the Articles of Confederation and the failures of ancient Greek confederacies, Madison sought to persuade the American public of the need for a stronger federal government as outlined in the proposed Constitution.