

Working around Walled Gardens

The Princeton Prosody Archive as Workflow



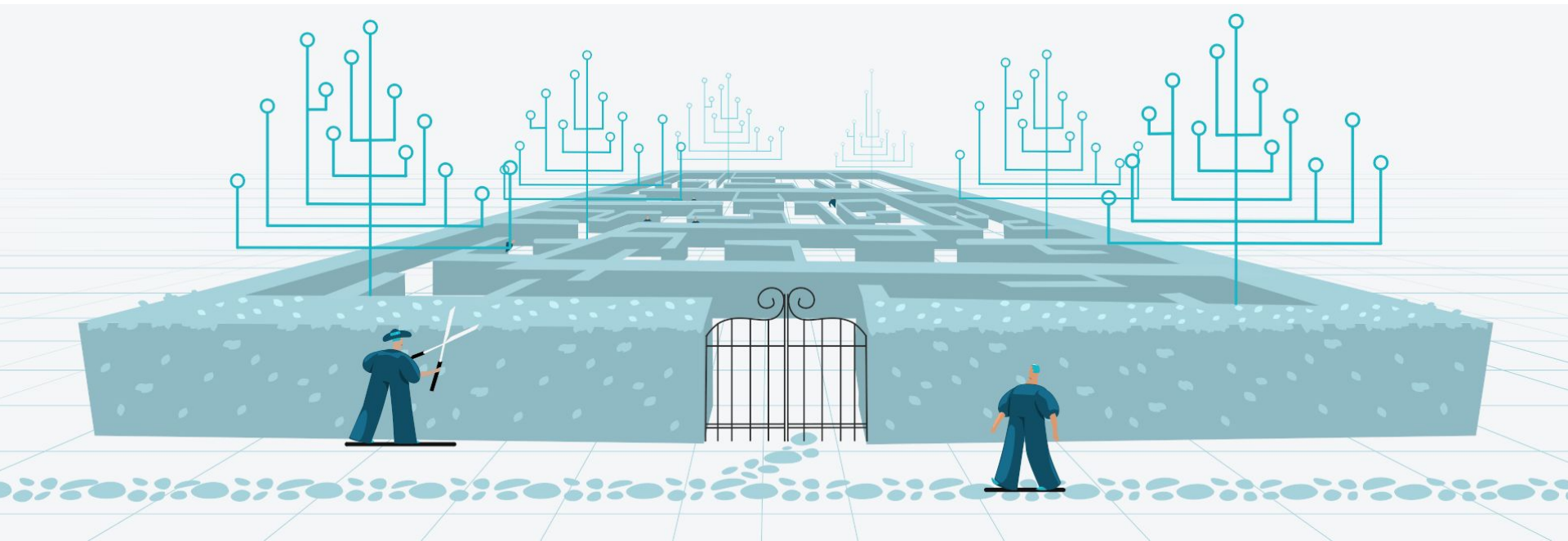
Mary Naydan, Rebecca Sutton Koeser, Meredith Martin

DARIAH Annual Event | June 20, 2024

Overview

1. What are Walled Gardens?
 - a. The Digital Research Landscape: How We Got Here
 - b. Limitations of Existing “Workflows”
 - c. Additional Challenges with TDM
 - d. Collaborative DH Projects
2. Case Study: The Princeton Prosody Archive
 - a. Overview
 - b. Data Sources
 - c. Technical Architecture as Workflow
 - d. “Dead Ends” & Roadblocks
 - e. The Path through the Hedge Maze
3. Futures Beyond Walled Gardens

What are Walled Gardens?



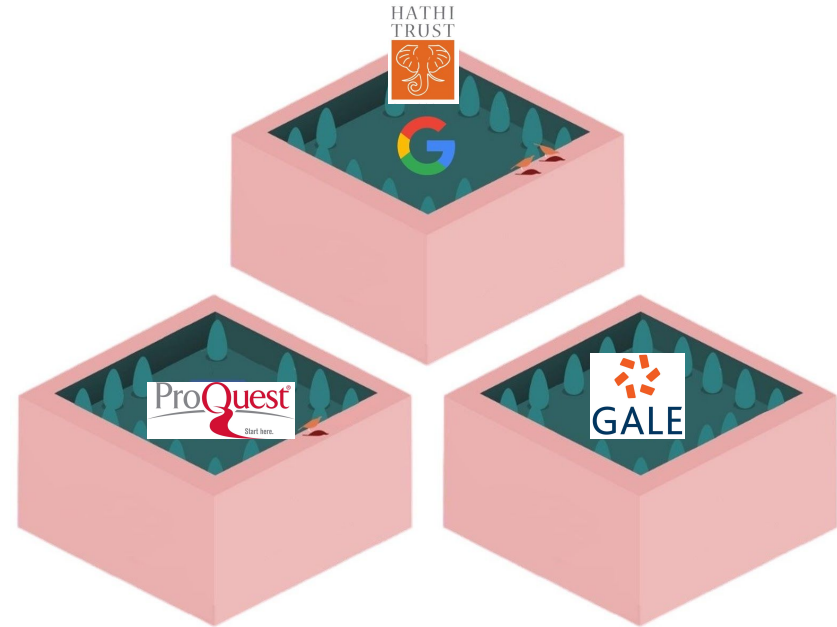
Since 1995–

A **closed platform, walled garden, or closed ecosystem** is a software system wherein the carrier or service provider has **control** over applications, content, and/or media, and **restricts** convenient access to non-approved applicants or content. This is in contrast to an open platform, wherein consumers generally have unrestricted access to applications and content.

– *Wikipedia*, accessed 2024

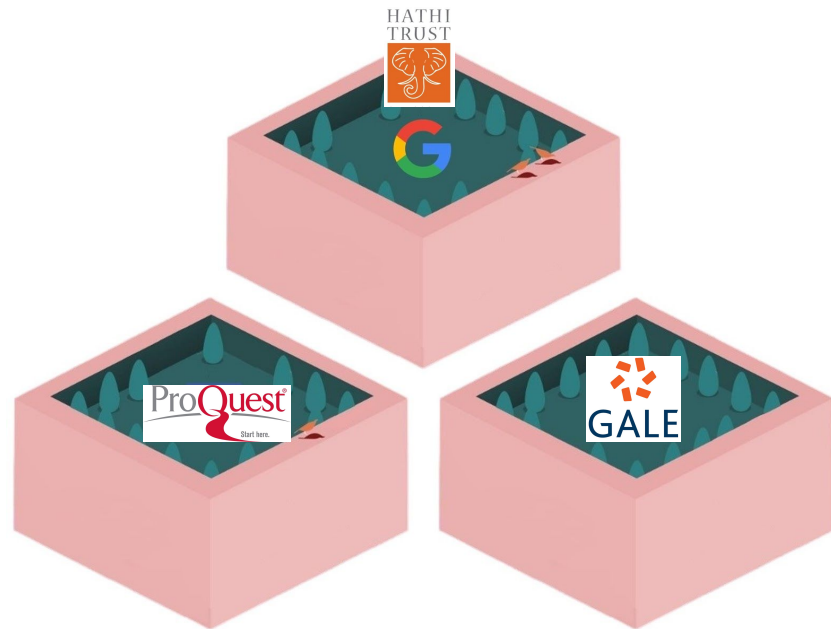
The Digital Research Landscape: How We Got Here

- 2008 Google Books project & lawsuits → “proPERTization and privatization of culture” (Frosio, 2011)
- “Uneven digitization” of texts privilege works from the US and UK (Risam, 2019)
- Prohibited, costly, or unclear access for TDM since 2015 (McCracken & Raub, 2022)



The Digital Research Landscape: How We Got Here

“[Researchers] seek materials that are the most relevant to their theses, which likely come from multiple vendors. While acceptance of TDM by vendors is growing, one of the current problems with vendor-permitted TDM is an **uncooperative, siloed approach.**”



Peter McCracken and Emma Raub, “Licensing Challenges Associated with Text and Data Mining,” *JLSC* (2023)

Limitations of Existing “Workflows”

HathiTrust RESEARCH CENTER HTRC Extracted Features Dataset
Page-level features from 17.1 million volumes [v.2.0]

Description

```
{
  "volumeID": "yale.39002053338092",
  "lang": "en",
  "startCharOffset": 231,
  "endCharOffset": 248,
  "entities": [
    {
      "entity": "GEORGE V. JOURDAN",
      "class": "PERSON",
      "startCharOffset": 231,
      "endCharOffset": 248,
      "linePos": "3",
      "pagePosSeq": "7",
      "pagePosLabel": "N/A"
    }
  ],
  "entity": "—\nCamb",
  "class": "PERSON",
  "startCharOffset": 485,
  "endCharOffset": 491,
  "linePos": "10.11",
  "pagePosSeq": "7",
  "pagePosLabel": "N/A"
}
```

Contents

# of volumes	17,123,746
In-copyright	10,550,952
Public domain and Creative Commons	6,572,794
# of pages	6,221,631,336
# of tokens	2,906,819,723,689

Resources

See how scholars are using the [EF Dataset](#)
[Full documentation](#)

GALE DIGITAL SCHOLAR LAB

Parts of Speech

Robinson Crusoe and Gullivers Travels

Legend

Parts of Speech

Click to toggle categories on and off

- NOUN
- PROPN
- PRON
- VERB
- ADV
- ADJ
- INTJ
- CCONJ
- SCONJ
- DET
- ADP
- PREP
- PUNCT
- SYM
- SPACE
- OTHER

Group Data By

Author

2 of 2 selected
Change selection

Graphs Shown: 10

Grid Columns: 1

Daniel Defoe

1 documents | Tagged 145,155 Parts of Speech

Count: 15,831
Percent: 10.91%

Jonathan Swift

1 documents | Tagged 60,063 Parts of Speech

Category

No categories are available for the filtered document set.

Download Availability

All documents

Filters

Adjusting filters will auto update the chart.

Keyword

Publication Title(s)

Your dataset results - (377 total documents)

All documents published in The Rag (Austin, TX) from 1965 - 1978

Keyphrases

Term frequency

Enter terms below to view frequency over time.

war, nuclear, vietnam, students

Left	Term	Right
the next danger ahead. The	lighthouse	is the greatest blessing that
of time. The first authentic	lighthouse	was Sigeum, on the Hellespont
name in connection with the	lighthouse	, which in France is called

Peter McCracken and Emma Raub, “Licensing Challenges Associated with Text and Data Mining,” *JLSC* (2023)

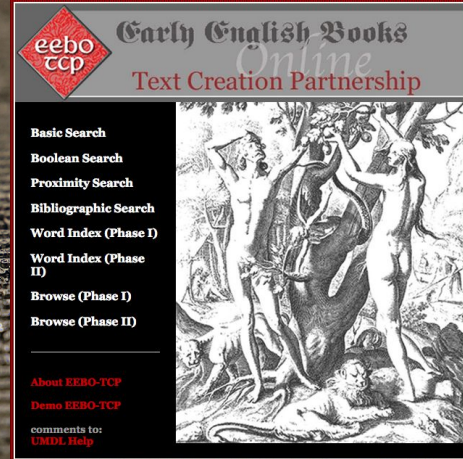
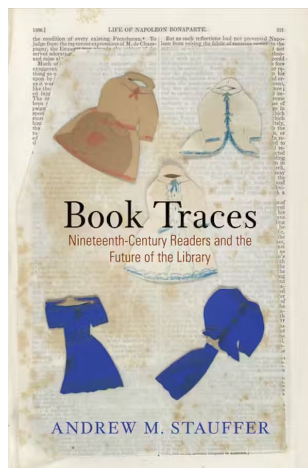
Additional Challenges of TDM

- Inhibitors to TDM research:
 - Strong copyright laws, privacy, and anti-hacking laws that vary country to country
 - Researchers' lack of legal knowledge
 - Private corporation and government grip on data, which impedes access/sharing & disincentivizes them from improving data as technology improves
- Effects:
 - Lessens cross-border/international collaboration
 - Places onus on researcher to transform data into suitable format for TDM
 - Leads US-based researchers to avoid certain projects more frequently than EU-based researchers due to litigious nature of US, despite fair use clause

Patricia Aufderheide, Brandon Butler, and Kimberly Anastacio, "The Chilling Effects of Obstacles to Accessing, Using, and Sharing In-Copyright Data for Quantitative Research," *Information & Culture* (2024)

Collaborative DH Projects

- Typically focus on one data source
- Often reinvent what libraries could be doing
- Digital editions and text corpora are both workarounds to the walled garden
- Front-end UX focus
- Where's the data?



Eighteenth Century Collections Online (ECCO) TCP

About ECCO-TCP



ECCO-TCP resulted from a partnership with Gale, part of Cengage Learning, created to produce highly accurate, fully-searchable, SGML/XML-encoded texts from among the 150,000 titles available in Gale's Eighteenth Century Collections Online (ECCO) database.

The Willa Cather Archive

cather.unl.edu



The Walt Whitman Archive

Ed Folsom & Kenneth M. Price, Editors

Published Works

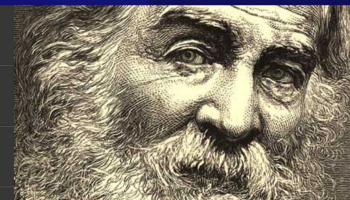
Books by Whitman; Periodicals; Translations

In Whitman's Hand

Manuscripts; Notebooks; Scribal Documents

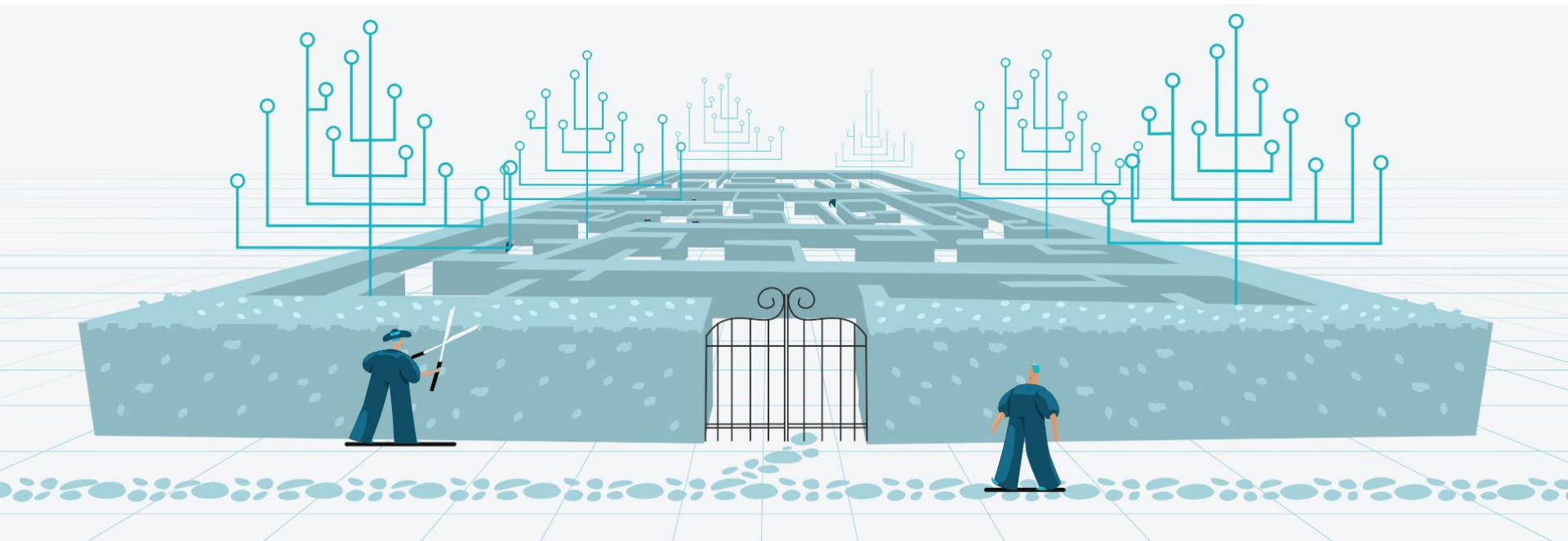
Life & Letters

Biography; Chronology; Letters

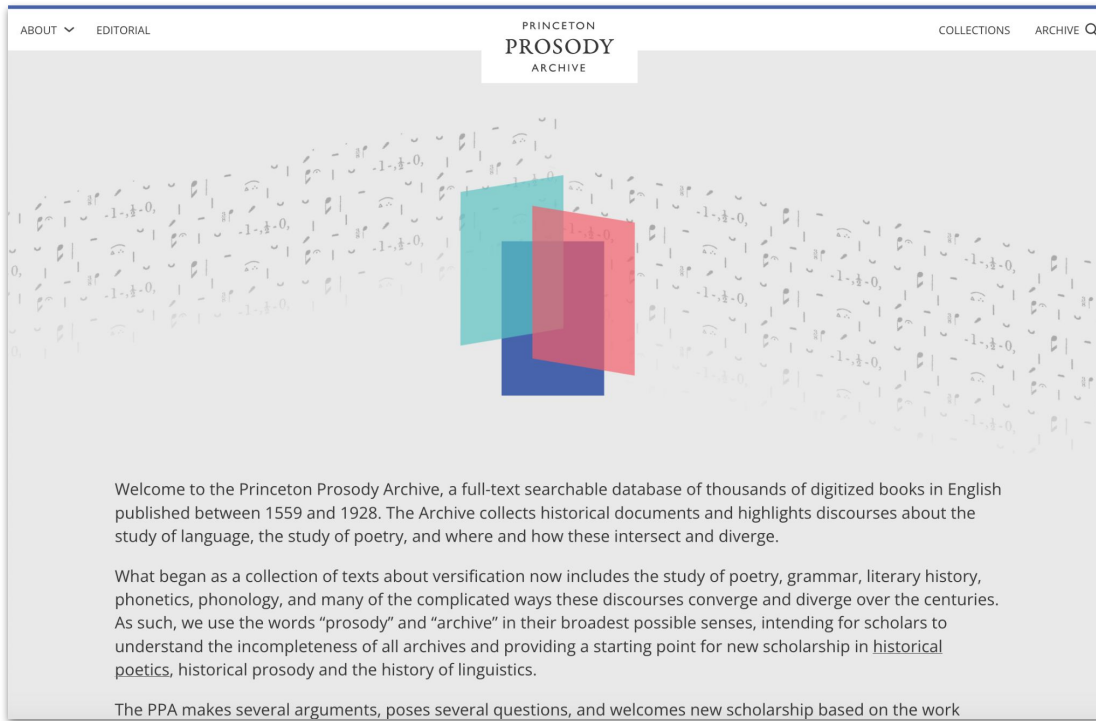


THE CENTER
FOR DIGITAL
HUMANITIES
@PRINCETON

Case Study: The Princeton Prosody Archive



The Princeton Prosody Archive - Overview



ABOUT EDITORIAL PRINCETON PROSODY ARCHIVE COLLECTIONS ARCHIVE

Welcome to the Princeton Prosody Archive, a full-text searchable database of thousands of digitized books in English published between 1559 and 1928. The Archive collects historical documents and highlights discourses about the study of language, the study of poetry, and where and how these intersect and diverge.

What began as a collection of texts about versification now includes the study of poetry, grammar, literary history, phonetics, phonology, and many of the complicated ways these discourses converge and diverge over the centuries. As such, we use the words “prosody” and “archive” in their broadest possible senses, intending for scholars to understand the incompleteness of all archives and providing a starting point for new scholarship in [historical poetics](#), historical prosody and the history of linguistics.

The PPA makes several arguments, poses several questions, and welcomes new scholarship based on the work

- Full-text searchable database of ~7,000 English-language works from 1559 to 1928 about the study of versification and pronunciation

The Princeton Prosody Archive - Overview

The screenshot displays the Princeton Prosody Archive interface. At the top, there are navigation links for 'ABOUT', 'EDITORIAL', 'COLLECTIONS', and 'ARCHIVE'. The main header reads 'PRINCETON PROSODY ARCHIVE'. A search bar contains the query 'iambic pentameter'. Below the search bar, there are filters for 'Collections' including 'Linguistic', 'Literary', 'Original Bibliography', 'Typographically Unique', and 'Uncategorized', along with 'Dictionaries' and 'Word Lists'. An 'Advanced Search' dropdown is also visible. The results section shows 'Displaying 249 digitized works' and a link to export citations to 'Zotero'. The first result is 'Suggestions for a System of Scansion of English in *The Poetry review*' by Ellis, Oliver C. de C., published in 1923 by The Poetry Society. Below the result, there are tabs for 'Literary', 'Original Bibliography', and 'Typographically Unique'. A thumbnail of the document is shown on the left, and a preview of the text is on the right, including the heading '348 THE POETRY REVIEW' and the text 'TROCHEE Only SPONDER DACTYL ANAPAEST, Grey Kare Sympathy Aberdeen AMPHIBRACH Supremely So we call a line of five iambs an iambic pentameter, and say that a sonnet consists of'.

- Includes “how-to” poetry handbooks, textbooks, grammar books, dictionaries, scholarly articles, elocution manuals, pronunciation guides...
- Curated into 6 collections

Data Sources



GALE PRIMARY SOURCES
EIGHTEENTH CENTURY COLLECTIONS ONLINE

The banner features a fountain pen resting on a piece of aged, handwritten paper with cursive script.



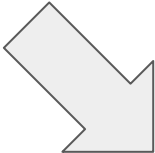
HATHI TRUST

The logo consists of the text "HATHI TRUST" in a serif font above an orange square containing a white stylized illustration of a pair of elephant ears.



eebo ccp
Early English Books Online
Text Creation Partnership

The banner has a grey background with a red diamond-shaped logo on the left containing the text "eebo ccp". The text "Early English Books Online" is in a large, elegant serif font, and "Text Creation Partnership" is in a smaller, red serif font below it.

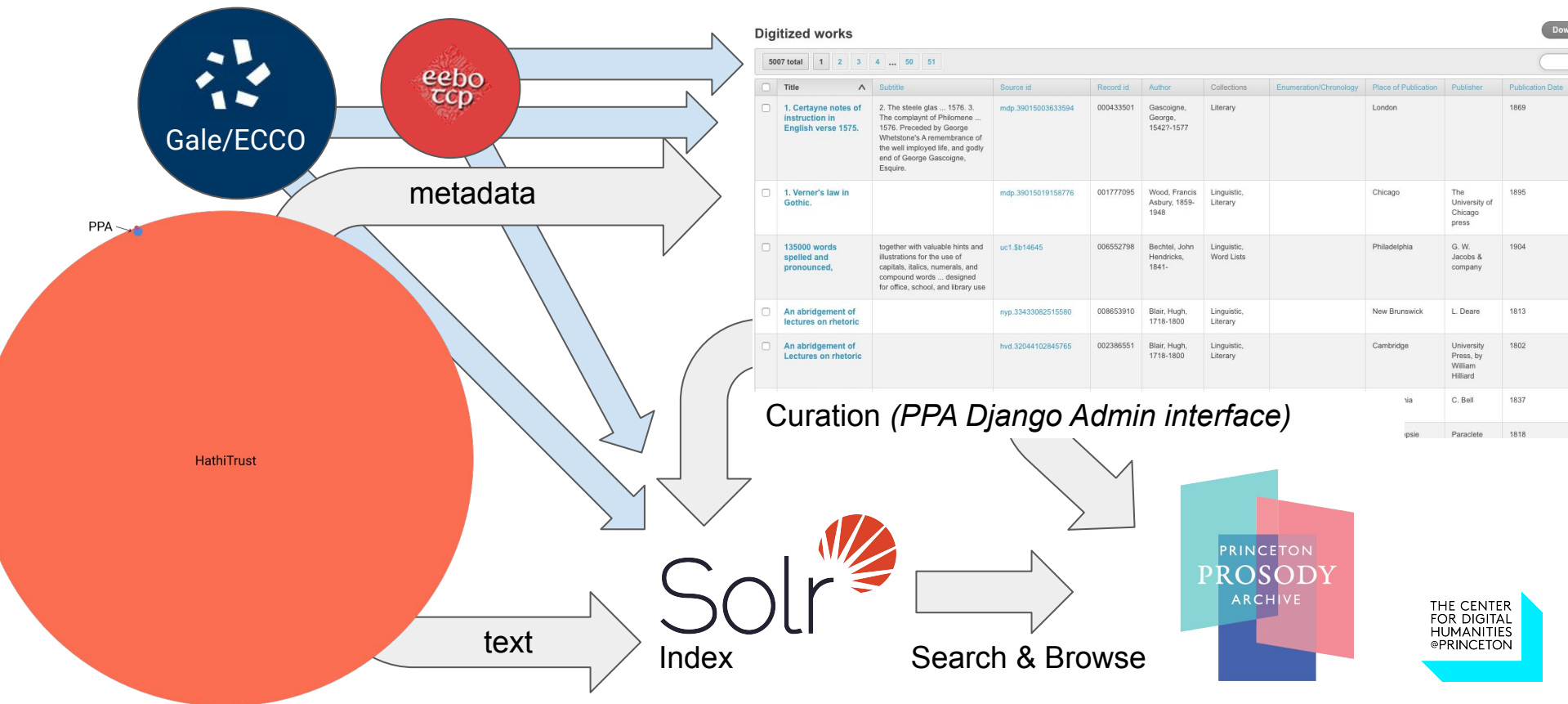


PRINCETON PROSODY ARCHIVE

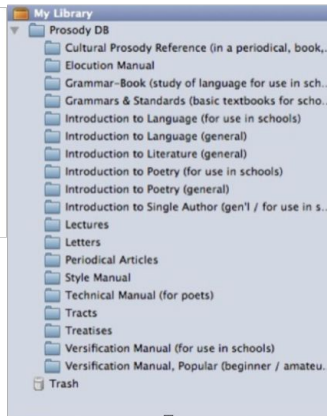
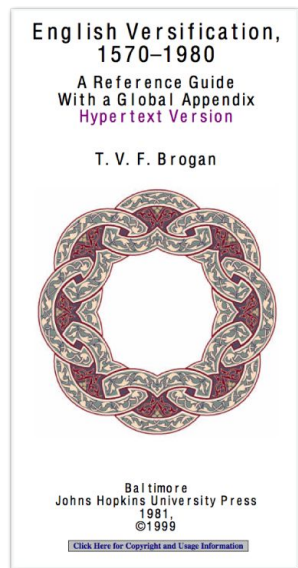
The logo features the text "PRINCETON PROSODY ARCHIVE" in a white sans-serif font, centered over a background of three overlapping, semi-transparent colored rectangles: teal, pink, and blue.



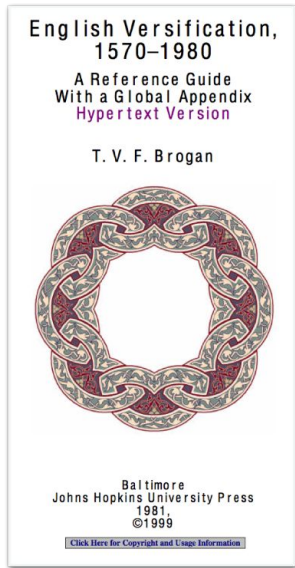
Technical Architecture as Workflow



“Dead Ends” & Roadblocks



“Dead Ends” & Roadblocks



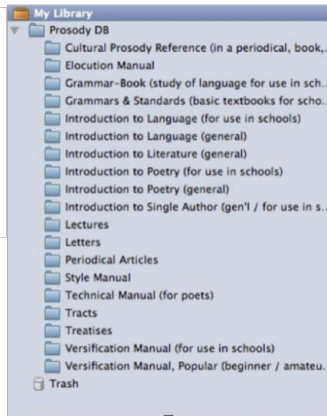
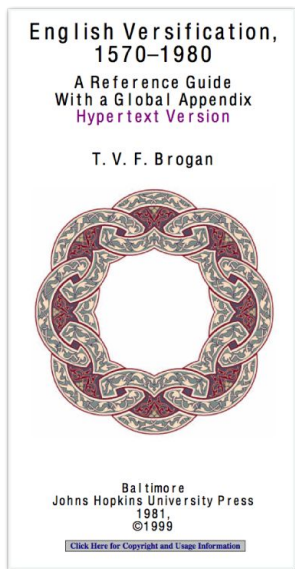
non-compete w/ Google!



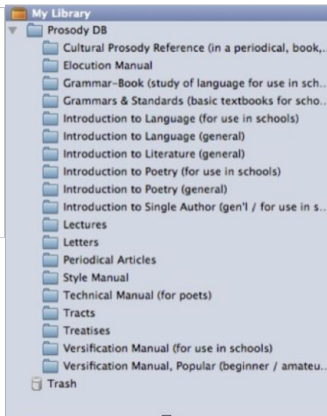
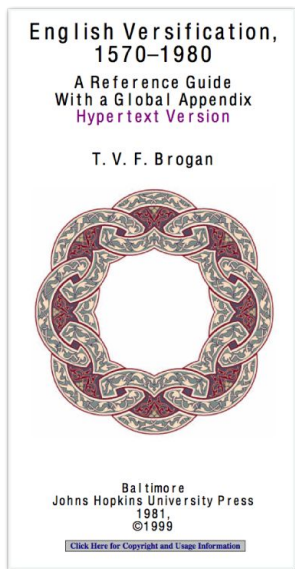
HATHI
TRUST



“Dead Ends” & Roadblocks



“Dead Ends” & Roadblocks



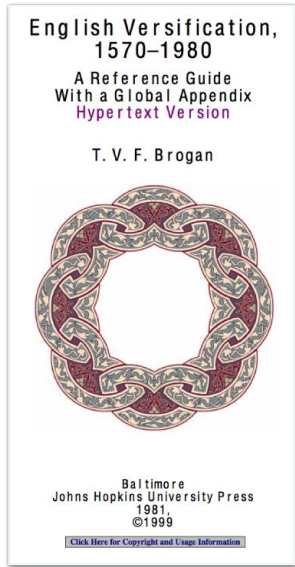
lots of restrictions!

...w/ Google!

lost contacts



“Dead Ends” & Roadblocks



lots of restrictions!

... w/ Google!

TRUST



lost contact

GAL

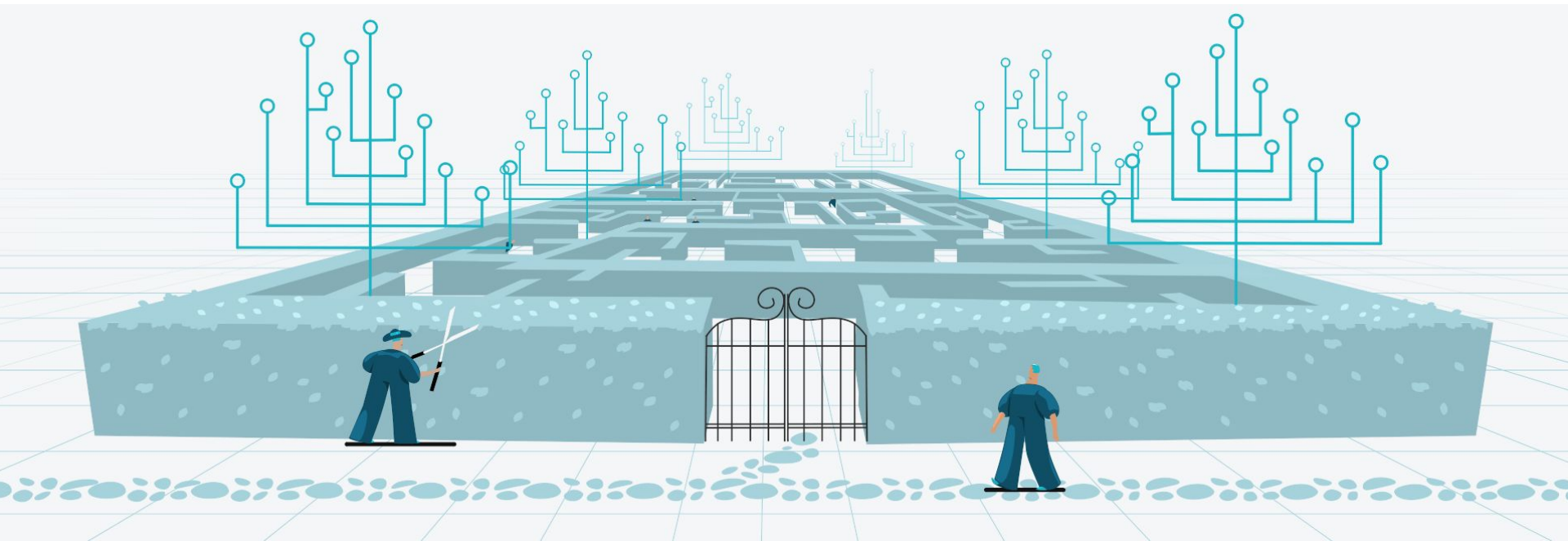


The Path through the Hedge Maze

- Leverage the power of your institution
- Devise Memoranda of Understandings (MOUs)
- Cultivate relationships with librarians and vendors
- Prepare for change (in contacts & data)
- Create a culture of documentation
- Team continuity is key
- Be persistent advocating for your research needs



Futures Beyond Walled Gardens



Futures Beyond Walled Gardens

- Move toward Open Source options like Internet Archive, which just made ECCO available
- Generalizable code like the PPA that cuts across walled gardens
 - Partnership/Fellowship with HathiTrust so that others can create “PPAs” with different content?
- Cross-institutional leverage
- Cultural Data Collectives movement



References

- Giancarlo F. Froisio, “Google Books Rejected: Taking the Orphans to the Digital Public Library of Alexandria,” *Santa Clara Computer and High Technology Law Journal* 28, no. 1 (Nov. 2011): 81-141.
- Roopika Risam, *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy* (Northwestern UP, 2019).
- Patricia McCracken and Emma Raub, “Licensing Challenges Associated With Text and Data Mining: How Do We Get Our Patrons What They Need?,” *Journal of Librarianship and Scholarly Communication* 11 no. 1 (2023): 1-14, <https://doi.org/10.31274/jlsc.15530>.
- Patricia Aufderheide, Brandon Butler, and Kimberly Anastacio, “The Chilling Effects of Obstacles to Accessing, Using, and Sharing In-Copyright Data for Quantitative Research,” *Information & Culture* 59, no. 1 (2024): 44-65, <https://doi.org/10.7560/IC59103>.
- “About the Collection,” HathiTrust, <https://www.hathitrust.org/the-collection/>.
- Ted Underwood, Patrick Kimutis, and Jessica Witte, “NovelTM Datasets for English-Language Fiction, 1700-2009,” *Journal of Cultural Analytics* 5, no. 2 (2020): 1-30, <https://doi.org/10.22148/001c.13147>.
- John A. Walsh et al., “‘The Library is Open!’: Open Data and an Open API for the HathiTrust Digital Library,” *CHR2023: Computational Humanities Research Conference* (December 6–8, 2023, Paris, France), <https://ceur-ws.org/Vol-3558/paper7875.pdf>.