

SHAKESPEARE AND THE DIGITAL HUMANITIES

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JOSIP JURAJ STROSSMAYER UNIVERSITY OF OSIJEK
**FACULTY OF HUMANITIES
AND SOCIAL SCIENCES**

9 November 2022

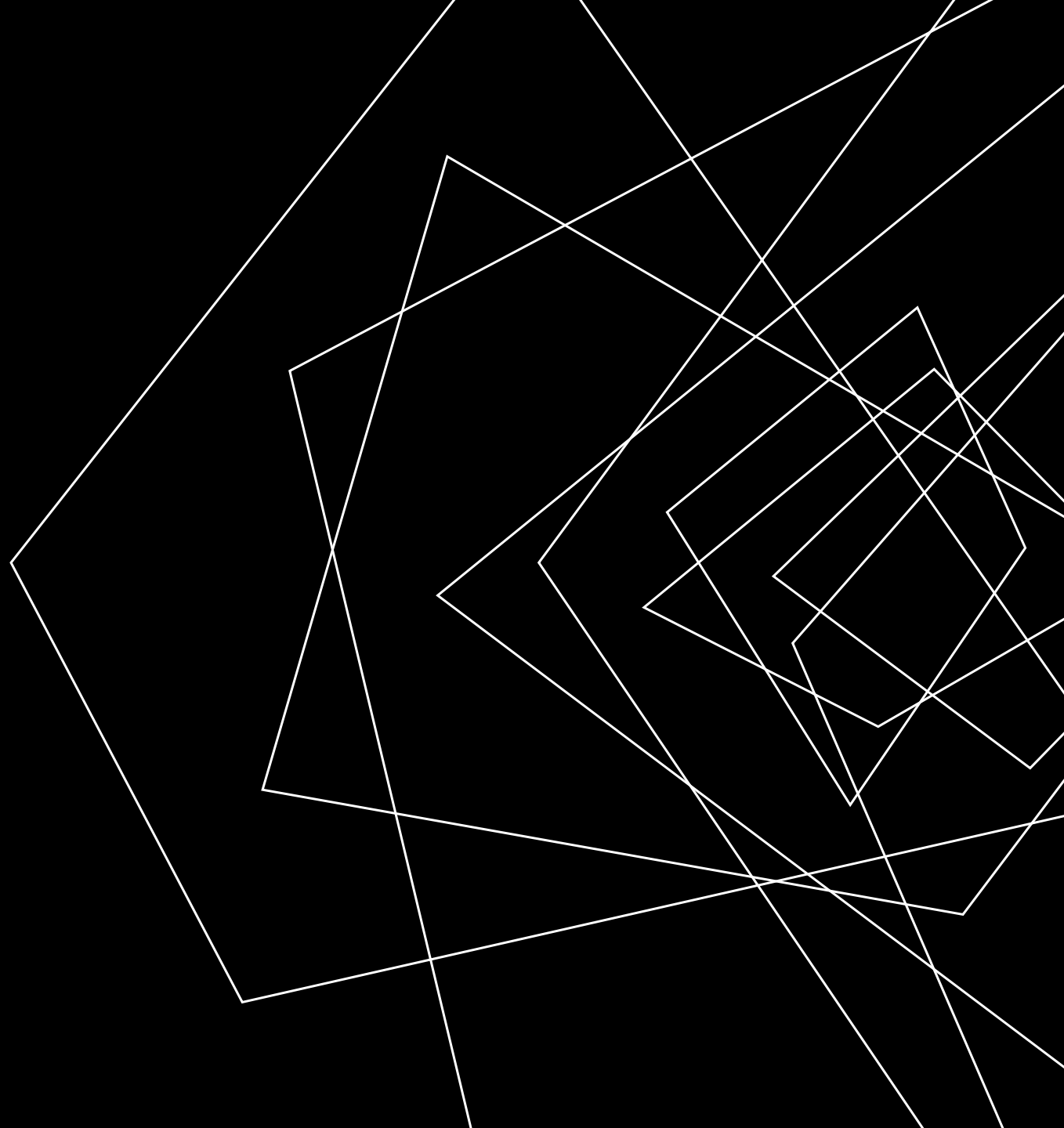
OUTLINE

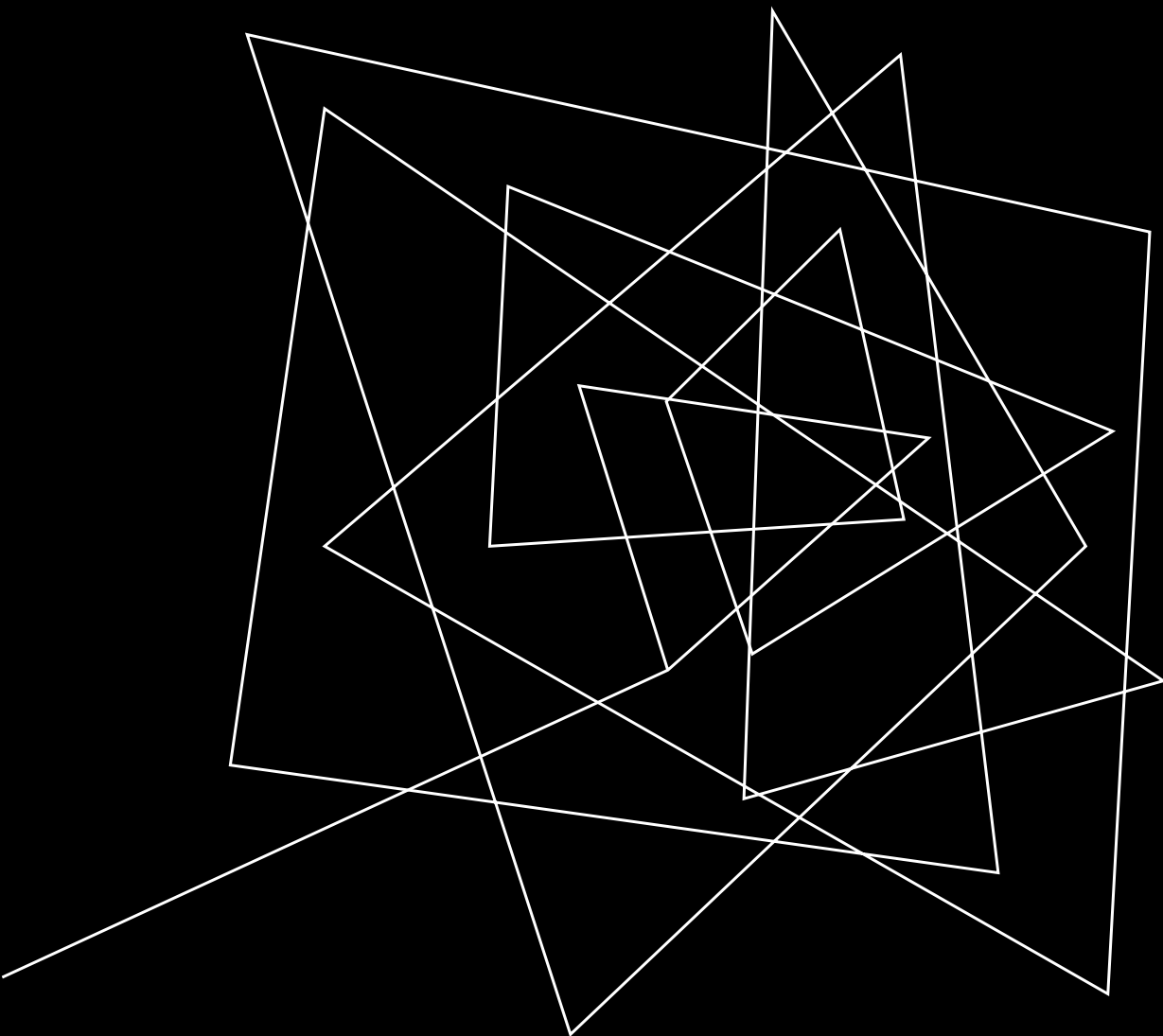
1. Definitions

2. History

3. Early Modern Literature

4. The Shakespeare Problem





DEFINITIONS

“What is digital humanities?” essays like this one are already genre pieces.
(Kirschenbaum 2010)

Digital humanities (DH) is an area of scholarly activity at the intersection of **computing** or **digital technologies** and the disciplines of the **humanities**. It includes the systematic use of digital resources in the humanities, as well as the analysis of their application. DH can be defined as new ways of doing scholarship that involve **collaborative, transdisciplinary, and computationally engaged research, teaching, and publishing**. It brings digital tools and methods to the study of the humanities with the recognition that the printed word is no longer the main medium for knowledge production and distribution.

WIKIPEDIA (2022)

BURDICK ET AL. (2012)

Digital humanities asks what it means to be a human being in the **networked information age** and to participate in **fluid communities** of practice, asking and answering research questions that cannot be reduced to a single genre, medium, discipline, or institution. . . . It is a **global, trans-historical, and transmedia approach to knowledge and meaning-making**.

KIRSCHENBAUM (2010)

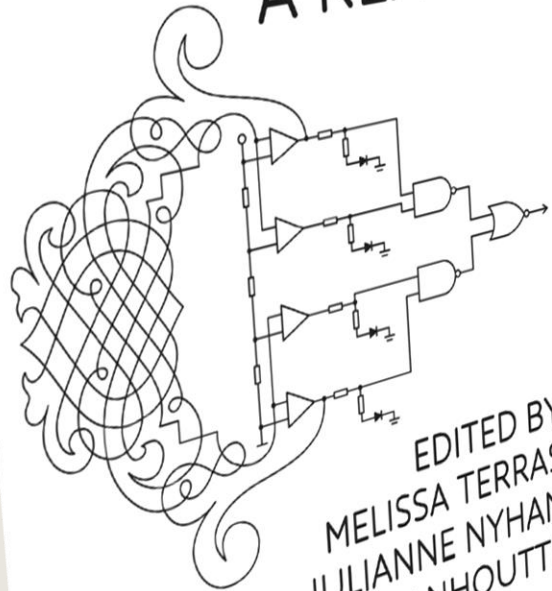
At its core, then, digital humanities is more akin to a **common methodological outlook** than an investment in any one specific set of texts or even technologies.

FLANDERS ET AL. (*DHQ*)
(2007)

It is tempting, in the first issue of a journal by this name, to pose the question, "What is digital humanities?" and perhaps to attempt an answer. Instead, we defer this question to the future, with the expectation that it will be answered, or at least addressed, in the annals that are to be written and published here. Not the first issue, nor even the tenth, will give a sense of the emerging shape: **it will take time for the range of submissions to represent the real contours of the field**.

DEFINITIONS

DEFINING DIGITAL HUMANITIES A READER



EDITED BY
MELISSA TERRAS
JULIANNE NYHAN
EDWARD VANHOUTTE

TERRAS, NYHAN, VANHOUTTE
(2013)

Why would one define an academic field? From one perspective such definitions have an obvious practical and utilitarian purpose: we must be able to define and describe what it is that we are doing not only to colleagues and students but to university management, funding agencies and the general public. Nevertheless, we should not view such work from this practical perspective alone. The ways that digital humanities are being (and have been) defined can reveal much about the implicit assumptions that we as a community hold. **So too the act of defining can reveal much about the identities that we are in the process of forging for ourselves, how we view ourselves in relation to other disciplines and the internal tensions that exist within the digital humanities community as a whole.** In short the ever growing literature on defining digital humanities can offer us an important insight into the dynamics of disciplinary formation.

“Introduction” in “Debates in th X +

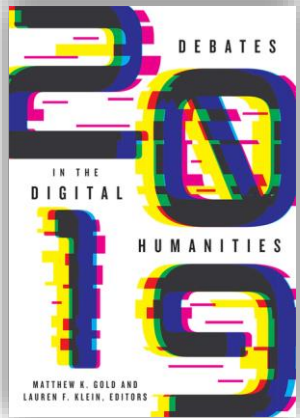
← → ↻ 🔒 https://dhdebates.gc.cuny.edu/read/untitled-f2ac72c-a469-49d8-be... ☆ 🔔 M ABP 📄 ☰

MENU CONTENTS ▾ Debates in the Digital Humanities 2019 👁 Aa 🔍 🗺

Introduction

A DH That Matters

Matthew K. Gold and Lauren F. Klein



What matters in 2019?

On the surface of things, not much. In the United States, we have seen “fake news” take the place of informed reporting, “free speech” replace equal protection, and personal profiteering vault a chaos agent into the role of commander in chief. There he remains, secured by a welter of corporate interests, conservative media moguls, GOP enablers, and a vocal minority of the U.S. citizenry who find the rhetoric of racism, sexism, xenophobia, and generalized vitriol more appealing than the aspiration of a more perfect union. Events that only a few years ago seemed impossible—the intentional destruction of the nation’s social safety net, open rallies of armed white supremacists, and even the prospect of nuclear war—have become part and parcel of our daily lives.

What is the role of the digital humanities in the charged environment of 2019, and how can digital humanists ally themselves with the activists, organizers, and others who are working to empower those most threatened by it? Having spent nearly a decade immersed in the *Debates in the Digital Humanities* series, and even longer in the field, we are convinced that digital humanists can contribute significantly to a larger technically and historically informed resistance. By enabling communication across communities and networks, by creating platforms that amplify the voices of those most in need of being heard, by pursuing projects that perform the work of recovery and resistance, and by undertaking research that intervenes in the areas of data surveillance and privacy,

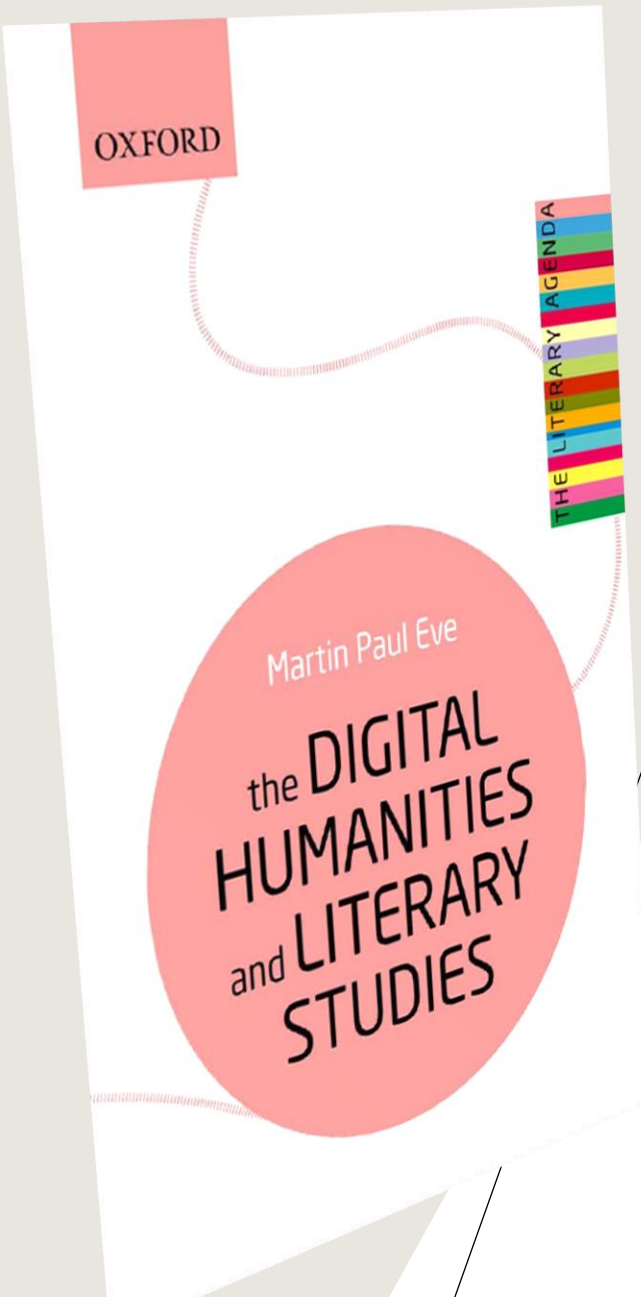
GOLD – KLEIN 2019

ACTIVISM

INCLUSIVITY

SELF-CRITICISM

<https://dhdebates.gc.cuny.edu/projects/debates-in-the-digital-humanities-2019>



OXFORD

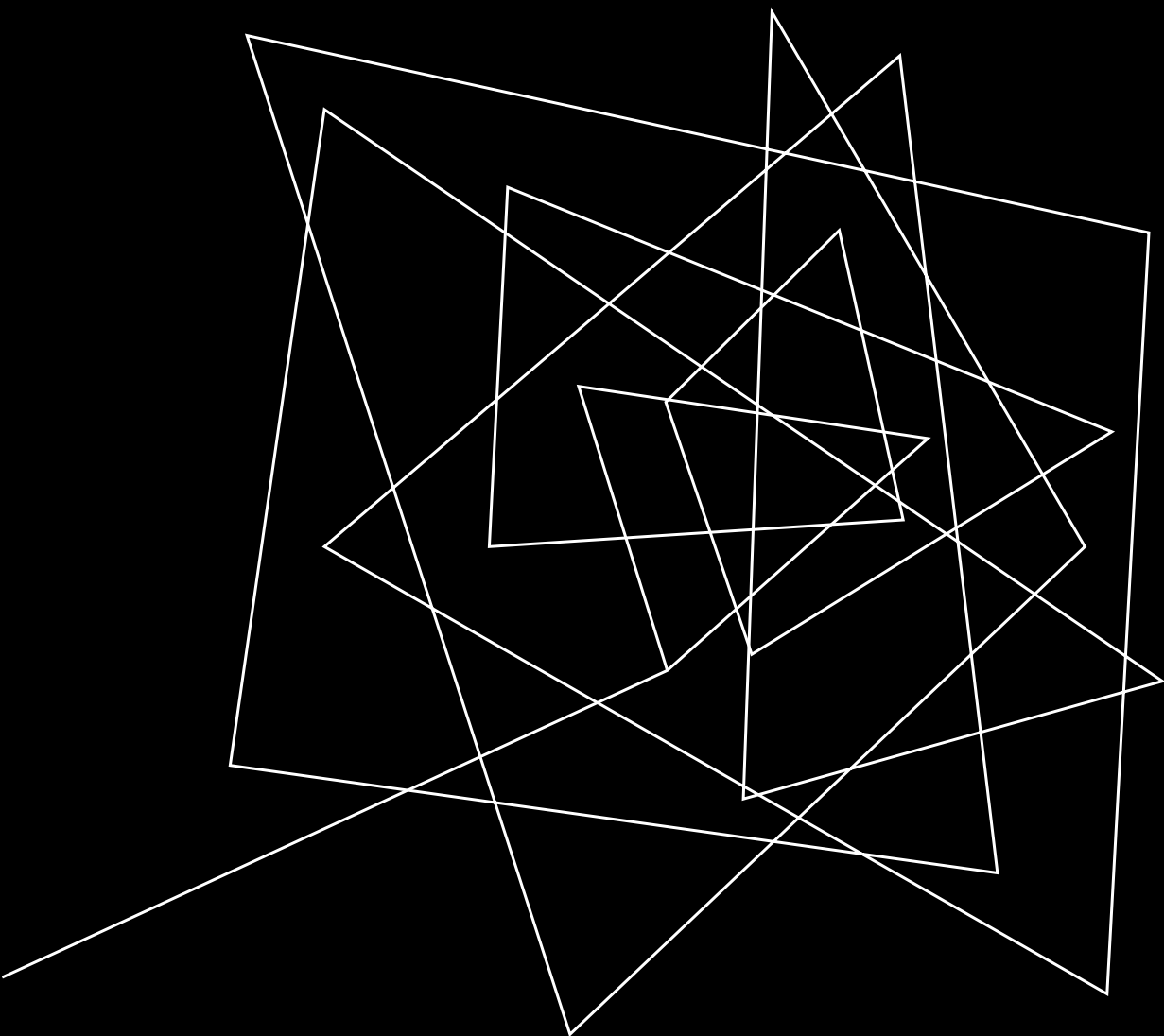
Martin Paul Eve

the **DIGITAL
HUMANITIES**
and **LITERARY
STUDIES**

THE LITERARY AGENDA

EVE (2022)

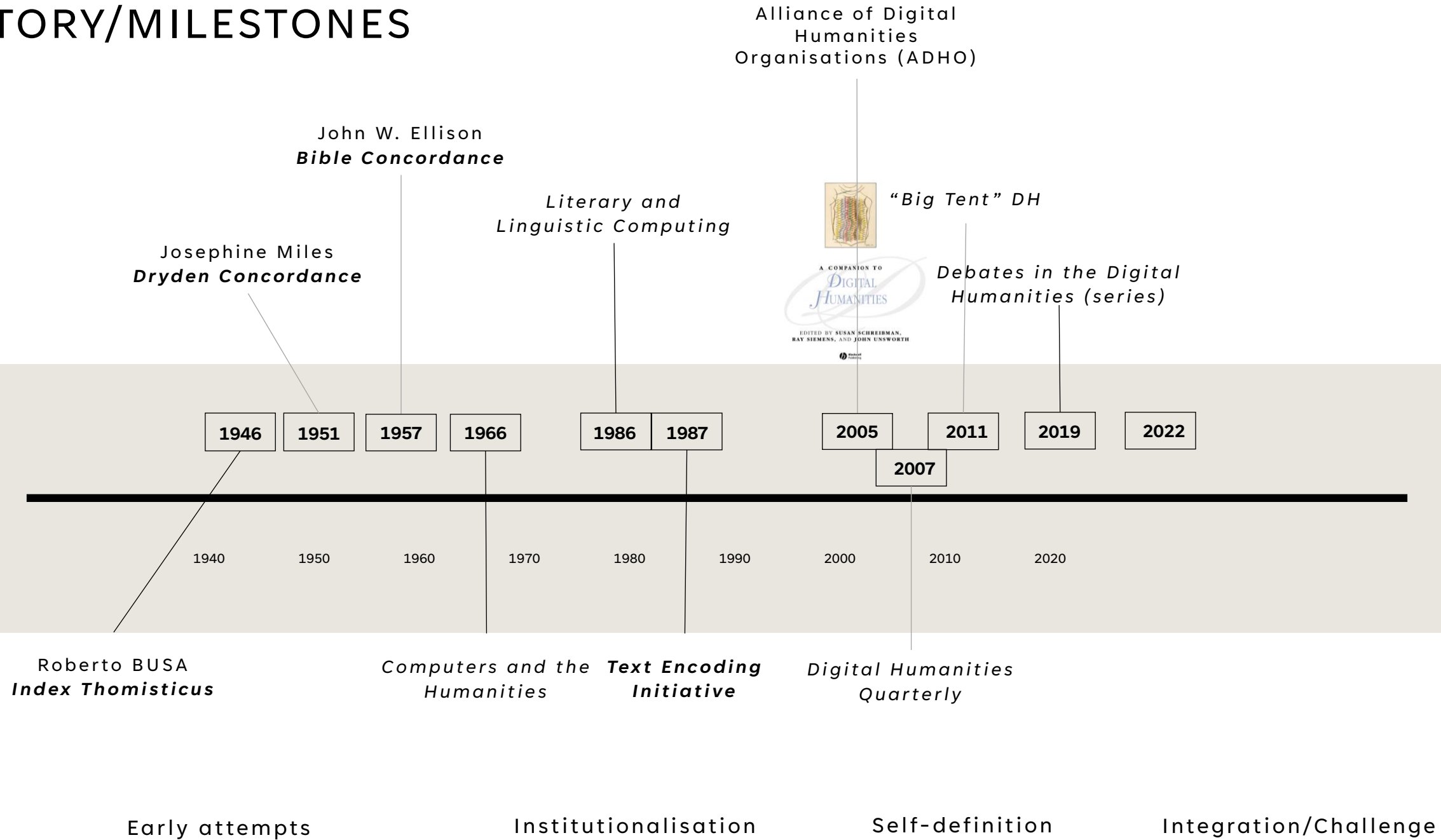
I jest somewhat. But the study of literature with the aid of computers is undoubtedly controversial. Critics have derided digital methods in literary studies for being: **useless** (they tell us nothing that we did not already know); **trivial** (counting the word 'whale' in *Moby-Dick* can tell us only one thing: how often the word 'whale' is used in *Moby-Dick*); **neoliberal** (producing software is the Silicon Valley model of scholarship); and just **plain wrong**. Proponents, by contrast, have pronounced forcefully on the possibilities for **broad-scale literary history** beyond the limitations on reading made by the finite human lifespan; on how we can better understand **genre and form** through **visualization and spatialization**; and even on the fresh perspectives such methods might bring for **rethinking core theoretical assumptions** about literature itself. **The digital humanities are certainly provocative and divisive.**



HISTORY

“Despite the variety and breadth of definitions of DH,
narratives of its history have been surprisingly homogenous.”
(Sula-Hill 2017)

HISTORY/MILESTONES



Search results

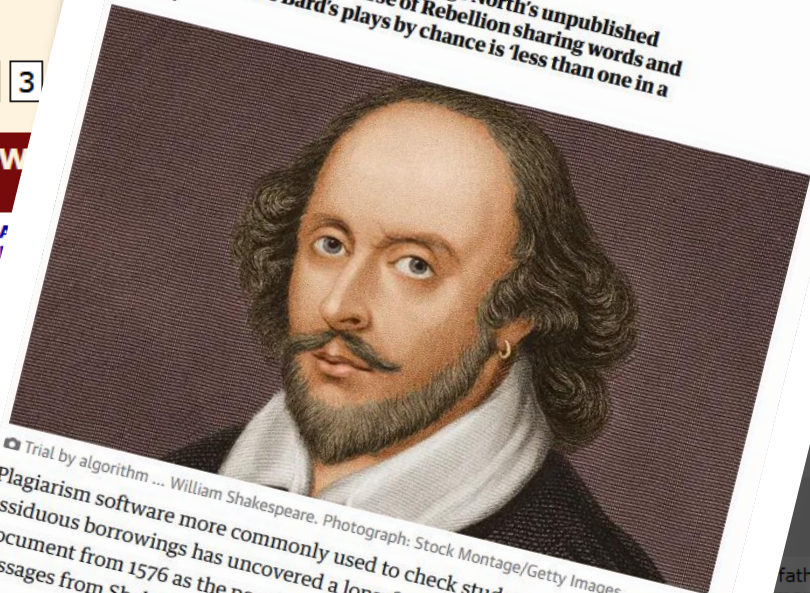
1-20 of 1,641 total

KEYWORD: **love**

Refine search Print-friendly New search

Plagiarism software pins down new source for Shakespeare's plays

Scholars say the likelihood of George North's unpublished manuscript *A Brief Discourse of Rebellion* sharing words and features with the Bard's plays by chance is 'less than one in a billion'



Trial by algorithm ... William Shakespeare. Photograph: Stock Montage/Getty Images

Plagiarism software more commonly used to check student essays for overly assiduous borrowings has uncovered a long-forgotten, handwritten document from 1576 as the possible source for more than 20 monologues and passages from Shakespeare's plays.

Independent scholar Dennis McCarthy and LaFayette College professor June

CONCORDANCES

1230 *CONCORDANTIAE SACRORUM BIBLIORUM*

- First concordance, by Hugh of St-Cher, a Dominican monk
- 500 monks working for him (legend)



1895 *SHAKESPEARE CONCORDANCE*

- full title: *New and Complete Concordance or Verbal Index to Words, Phrases and Passages in the Dramatic Works of Shakespeare, with a supplementing concordance to his poems* (1894)
- John Bartlett
- decades of work

USES

- Stylometrics
 - Milton's influence on Shelley (Joseph Raben)
 - the modernism of Swift's style (Louis T. Milic)
- Attribution studies
 - Shakespeare (Dennis McCarthy)

```

1903 The harlot's cheek, beautied with plast'ring art,
1904 Is not more ugly to the thing that helps it
1905 Than is my deed to my most painted word.
1906 O heavy burthen!
1907 Pol. I hear him coming. Let's withdraw, my lord.
1908                                     Exeunt King and Polonius].
1909
1910                         Enter Hamlet.
1911
1912 Ham. To be, or not to be- that is the question:
1913 Whether 'tis nobler in the mind to suffer
1914 The slings and arrows of outrageous fortune
1915 Or to take arms against a sea of troubles,
1916 And by opposing end them. To die- to sleep-
1917 No more; and by a sleep to say we end
1918 The heartache, and the thousand natural shocks
1919 That flesh is heir to. 'Tis a consummation
1920 Devoutly to be wish'd. To die- to sleep.
1921 To sleep- perchance to dream: ay, there's the rub!
1922 For in that sleep of death what dreams may come
1923 When we have shuffled off this mortal coil,
1924 Must give us pause. There's the respect
1925 That makes calamity of so long life.
1926 For who would bear the whips and scorns of time,
1927 Th' oppressor's wrong, the proud man's contumely,
1928 The pangs of despis'd love, the law's delay,
1929 The insolence of office, and the pangs

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Simple transcription

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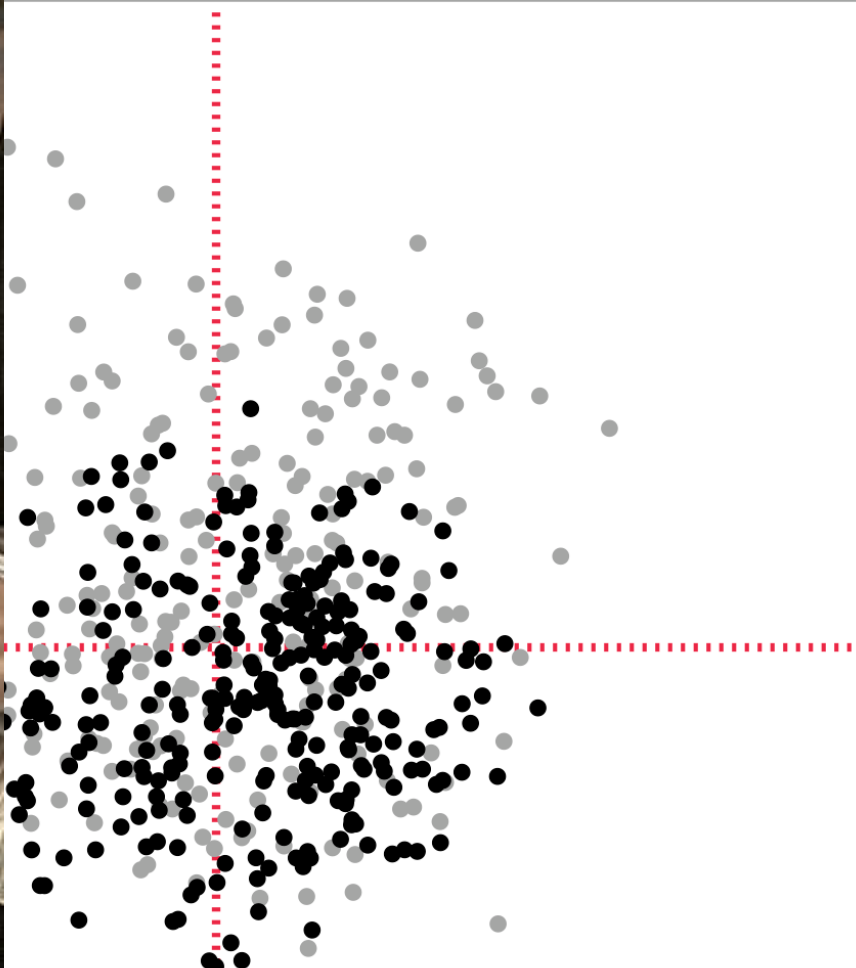
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2   <w xml:id="fs-ham-0271800" n="SD 3.1.63.2">Enter</w>
3   <c> </c>
4   <w xml:id="fs-ham-0271820" n="SD 3.1.63.2">Hamlet</w>
5   <pc xml:id="fs-ham-0271830" n="SD 3.1.63.2">.</pc>
6 </stage>
7 <sp xml:id="sp-1762" who="#Hamlet_Ham">
8   <speaker xml:id="spk-1762">
9     <w xml:id="fs-ham-0271840">HAMLET</w>
10  </speaker>
11  <l xml:id="ftln-1762" n="3.1.64">
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13    <c> </c>
14    <w xml:id="fs-ham-0271870" n="3.1.64" lemma="be" ana="#vvi">be</w>
15    <c> </c>
16    <w xml:id="fs-ham-0271890" n="3.1.64" lemma="or" ana="#cc">or</w>
17    <c> </c>
18    <w xml:id="fs-ham-0271910" n="3.1.64" lemma="not" ana="#xx">not</w>
19    <c> </c>
20    <w xml:id="fs-ham-0271930" n="3.1.64" lemma="to" ana="#acp-cs">to</w>
21    <c> </c>
22    <w xml:id="fs-ham-0271950" n="3.1.64" lemma="be" ana="#vvi">be</w>
23    <pc xml:id="fs-ham-0271960" n="3.1.64">-</pc>
24    <w xml:id="fs-ham-0271970" n="3.1.64" lemma="that" ana="#d">that</w>
25    <c> </c>
26    <w xml:id="fs-ham-0271990" n="3.1.64" lemma="be" ana="#vvz">is</w>
27

```

Machine-readable transcription

EARLY MODERN STUDIES AFTER THE DIGITAL TURN

Edited by Laura Estill, Diane K. Jakacki, and Michael Ulliyot



-10

-10

-5

0

5

10

Component 1 (14.1 %)

USES

DocuScope – LAT-analysis

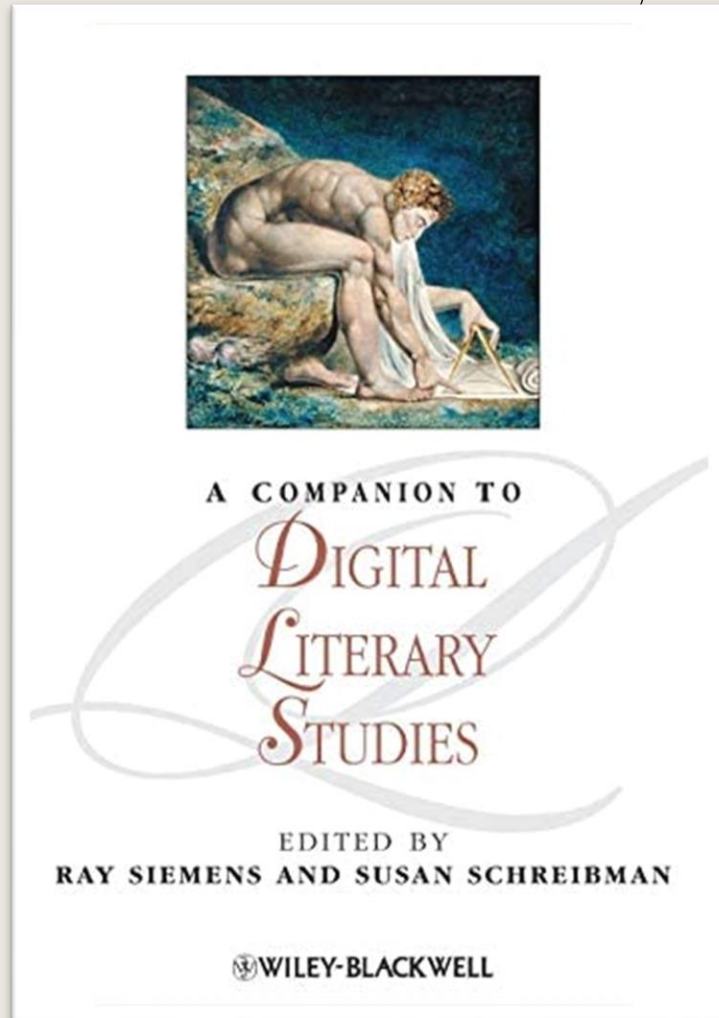
- **Linguistic Action Types:** “Each LAT consists of words and phrases that have the same function—marking first person, for example, or encoding anger, or introducing turns in rapid dialogue. Because LATs are more sophisticated linguistically than individual words, counting them gives us a more complex, nuanced picture of what’s going on linguistically in the texts we’re comparing.”
- 72 dimensions examined
- reduced to 2 dimensions in the graph (Principal Component Analysis)

“And what about Shakespeare? Shakespeare clusters with his professional colleagues in the central mass of dots—**resolutely average, doing similar things to them, at similar rates.** How do we reconcile this with our notion that Shakespeare is, by about as many orders of magnitude as you care to name, “better” than everyone else? **Either our sense of Shakespeare as exceptional is wrong, or, whatever it is that makes Shakespeare great, we ain’t counting it yet.**” (Witmore-Hope 2016)

EARLY MODERN LITERATURE

“There is no scholarly agreement on exactly when the digital revolution in Renaissance and seventeenth-century literature got under way.” (Steggle 2013)

STEGGLE (2013) – EM AND DH



- connection with major scholarly projects of the **predigital age**
- ease of access
 - availability
 - usability
 - authority
 - completeness
- new opportunities → **attribution studies**
- digital scholarly mediums → **blog**

EM AND DH - EVOLUTION

English
Short Title
Catalogue
(1926)

Pollard - Redgrave

<http://estc.bl.uk>

University
Microfilms
Project
(1938)

Eugene Power

Early English
Books Online
(1998)

<https://quod.lib.umich.edu/e/eebogroup/>

Text
Creation
Partnership
(1999-)

[Early Modern Digital Review](#) - 2018

SOME SHAKESPEARE RESOURCES

Internet Shakespeare Editions

internetshakespeare.uvic.ca

Born from a love of labour project, grew into one of the best online editions of Shakespeare's plays, featuring different versions of the text and offering annotations, too.

The Shakespeare Census

shakespearecensus.org

Catalogue trying to collect information on all Shakespeare editions until 1700. Contains info on ~3000 copies, offers digital facsimiles of ~700 copies.

Folger Shakespeare Library

folger.edu

Website of the probably richest collection of all things Shakespeare. Providing access to encoded texts of the plays and a plethora of material for different kinds of audiences.

Shakespeare's Words

shakespeareswords.com

Contains Shakespeare's plays with glossary, thesaurus and interesting statistical insights into Shakespeare's use of words.

World Shakespeare Bibliography

worldshakesbib.org

Bibliography with more than 135,000 items.




DIGITAL HUMANITIES' SHAKESPEARE PROBLEM

Despite the potential for democratization or canon expansion, digital projects too often reify canon, even when they attempt to subvert it. (Estill 2019)

Article

Digital Humanities' Shakespeare Problem

Laura Estill 

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lestill@stfx.ca

Received: 28 January 2019; Accepted: 23 February 2019; Published: 4 March 2019



Abstract: Digital humanities has a Shakespeare problem; or, to frame it more broadly, a canon problem. This essay begins by demonstrating why we need to consider Shakespeare's position in the digital landscape, recognizing that Shakespeare's prominence in digital sources stems from his cultural prominence. I describe the Shakespeare/not Shakespeare divide in digital humanities projects and then turn to digital editions to demonstrate how Shakespeare's texts are treated differently from his contemporaries—and often isolated by virtue of being placed alone on their pedestal. In the final section, I explore the implications of Shakespeare's popularity to digital humanities projects, some of which exist solely because of Shakespeare's status. Shakespeare's centrality to the canon of digital humanities reflects his reputation in wider spheres such as education and the arts. No digital project will offer a complete, unmediated view of the past, or, indeed, the present. Ultimately, each project implies an argument about the status of Shakespeare, and we—as Shakespeareans, early modernists, digital humanists, humanists, and scholars—must determine what arguments we find persuasive and what arguments we want to make with the new projects we design and implement.

ESTILL (2019)

SHAKESPEAREAN RHIZOMATICS

Digital Shakespeares: extraordinary and endless flow of relations

BIAS IN THE PREDIGITAL SOURCES

Oxford English Dictionary, library catalogues

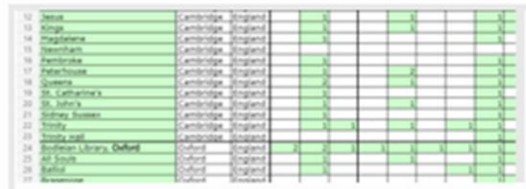
DH'S DEMOCRATIZING FORCE

Was predicted to open up the canon? Has it?

SMALL-SCALE DIGITAL PROJECTS

Breadth VS **depth** – almost exclusively in Shakespeare

Other authors: **boutique projects**



Book Title	Location	Year	...
12. John...	Cambridge	1641	...
13. John...	Cambridge	1641	...
14. John...	Cambridge	1641	...
15. John...	Cambridge	1641	...
16. John...	Cambridge	1641	...
17. John...	Cambridge	1641	...
18. John...	Cambridge	1641	...
19. John...	Cambridge	1641	...
20. John...	Cambridge	1641	...
21. John...	Cambridge	1641	...
22. John...	Cambridge	1641	...
23. John...	Cambridge	1641	...
24. John...	Cambridge	1641	...
25. John...	Cambridge	1641	...
26. John...	Cambridge	1641	...
27. John...	Cambridge	1641	...

CAVENDISH'S BOOKS

This chart—begun in 2014 by Cameron Kroetsch, and finished in 2018 by myself (Liza Blake) and my RA Alahieh Amini1—gives all the locations in which copies of Cavendish's books survive.

[Read More »](#)

Large colored links to digital resources, listing them chronologically according to the dates of print publication for the original works. Because they were produced as part of a massive project to digitize the early modern print archive, TCP texts are not perfect transcriptions, so some errors and untranscribed characters or words persist in versions based upon them. A handful of digital editions produced independently of the TCP project are also included below, which feature a greater degree of editorial integrity.

If you know of any other versions of Cavendish's works freely available online, please contact Jacob Tootalian at jacobtootalian@gmail.com.

LINKS TO DIGITAL TEXTS

These electronic texts are listed chronologically according to the dates of print publication for the original works. A few editions produced independently of the TCP project are also included.

[Read More »](#)



BW - SCHOLARLY EDITION

This in-progress scholarly edition of Margaret Cavendish's *The Blazing World* presents the 1668 publication of the text. Annotations provided using Hypothos.is

[Read More »](#)



CROWDSOURCING CAVENDISH

Help us access and correct versions of the early English print archive available through 18thConnect. Doing so will help us make these texts freely available digitally.

[Read More »](#)

SOME LINKS

1. Test - AI or Human text/music/image:
<https://www.tidio.com/blog/ai-test/#ai-survey>
2. AI image generators:
<https://huggingface.co/spaces/stabilityai/stable-diffusion> |
<https://hotpot.ai/art-generator> |
<https://creator.nightcafe.studio/stable-diffusion-image-generator>
3. AI image generator:
<https://huggingface.co/spaces/stabilityai/stable-diffusion>
4. Abstract generator and grammarly-like writing tool:
<https://www.writefull.com/>
5. Early modern lexicons: <https://leme.library.utoronto.ca/>
6. Alliance of Digital Humanities Organisations (with publications online): <https://adho.org/publications/>
7. Voyant Tools – a free-to-use online tool for text-analysis:
<https://voyant-tools.org/>
8. The Infinite Conversation (an AI-based, automatically generated, never-ending conversation between Werner Herzog and Slavoj Žižek): <https://infiniteconversation.com/>.

Type five words that come to your mind when you see/hear the term "digital humanities".



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