

Measuring Poetic Style: a Comparative Approach to Historical Poetics

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style

“Before the war at a luncheon party like this people would have said precisely the same things but they would have sounded different, because in those days they were accompanied by a sort of humming noise, not articulate, but musical, exciting, which changed the value of the words themselves. Could one set that humming noise to words? Perhaps with the help of the poets one could.. A book lay beside me and, opening it, I turned casually enough to Tennyson.”

Virginia Woolf, A Room of One's Own

history

There are historically specific linguistic and formal choices that distinguish texts by time period, genre, place, etc

“One of the major difficulties of the social history of philosophy, art or literature is that it has to reconstruct these **spaces of original possibles** [*sic*] which, because they were part of the self-evident givens of the situation, remain **unremarked** and are therefore unlikely to be mentioned in contemporary accounts, chronicles, or memoirs.”

Pierre Bourdieu, “The Field of Cultural Production”

“. . . every position, even the dominant one, depends . . . on the other positions constituting the field.”

Pierre Bourdieu, “The Field of Cultural Production”

sociological poetics

- seeks to understand the structural relationship of literature to social, economic, and cultural forces
- looks beyond individual writers to the larger social formations that make possible different literary forms

“The aims of sociological poetics are primarily specification, description, and analysis. That is: to isolate the literary work as such, to reveal its structure, to determine the possible forms and variations of this structure, and to define its elements and their functions. . . . Before searching for the laws of poetic forms, it is necessary to know what these forms are. These laws can only be found as the result of a large-scale literary history.”

Bahktin/Medvedev, *The Formal Method in Literary Scholarship: A Critical Introduction to Sociological Poetics*

books in the world

metadata

Bibliographic metadata describe the book as an object that exists in the world

The poetical works of James Beattie.

Author: Beattie, James, 1735-1803.; Dyce, Alexander,**Publication:** London : Bell and Daldy, 1866

The lost tales of Miletus,

Author: Lytton, Edward Bulwer Lytton, Baron, 1803-1873.**Publication:** London, J. Murray, 1866

The poetical works of Thomas Parnell.

Author: Parnell, Thomas, 1679-1718.; Mitford, John,**Publication:** London : Bell and Daldy, 1866

Poems and ballads

Author: Swinburne, Algernon Charles, 1837-1909.
Publication: London : Edward Moxon, 1866

[WorldCat database search results]

metadata as data

- defamiliarize catalog records from their institutional functions of enumeration and location
- transform this data to enable exploration and analysis

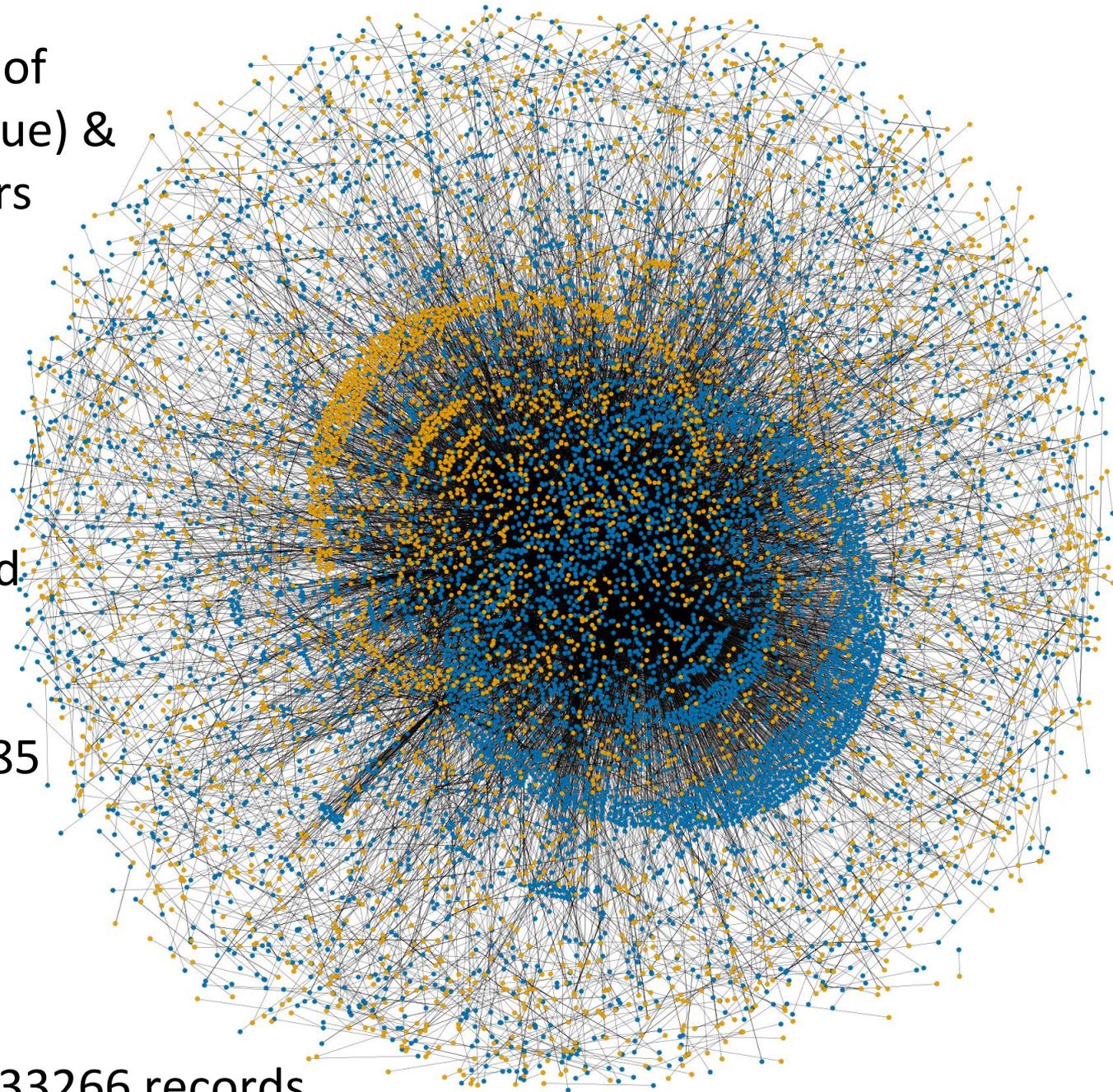
data mining the catalog

http://www.worldcat.org/webservices/catalog/search/sru?query=srw.kw+%3D+%28%22verse*%22+or%22poem*%22+or%22elegy%22+or%22elegies%22+or%22sonnet*%22+or%22ode*%22+or%22lyric*%22%29+and+srw.yr+%3D+%221860%22+and+srw.mt+%3D%22bks%22+and+srw.la+%3D%22eng%22+and+srw.pl+%3D+%28%22London%22+or%22Oxford%22+or%22Cambridge%22+or%22Manchester%22+or%22Edinburgh%22+or%22Glasgow%22+or%22Dublin%22+or%22Leeds%22+or%22Liverpool%22%29&servicelevel=full&frbrGrouping=off&maximumRecords=100&startRecord=1&sortKeys=Author&wskey=3bgLamP5K3t5eXZy3Lf11LDIZi5whnNKr4knMrhw h4qXbvr6KaMeQA7leX9V2zHs3Q9uW6E5IQQp1lxk

network of
poets (blue) &
publishers
(gold)

books of
poetry
published
in major
cities
1860-1885

dataset: 33266 records



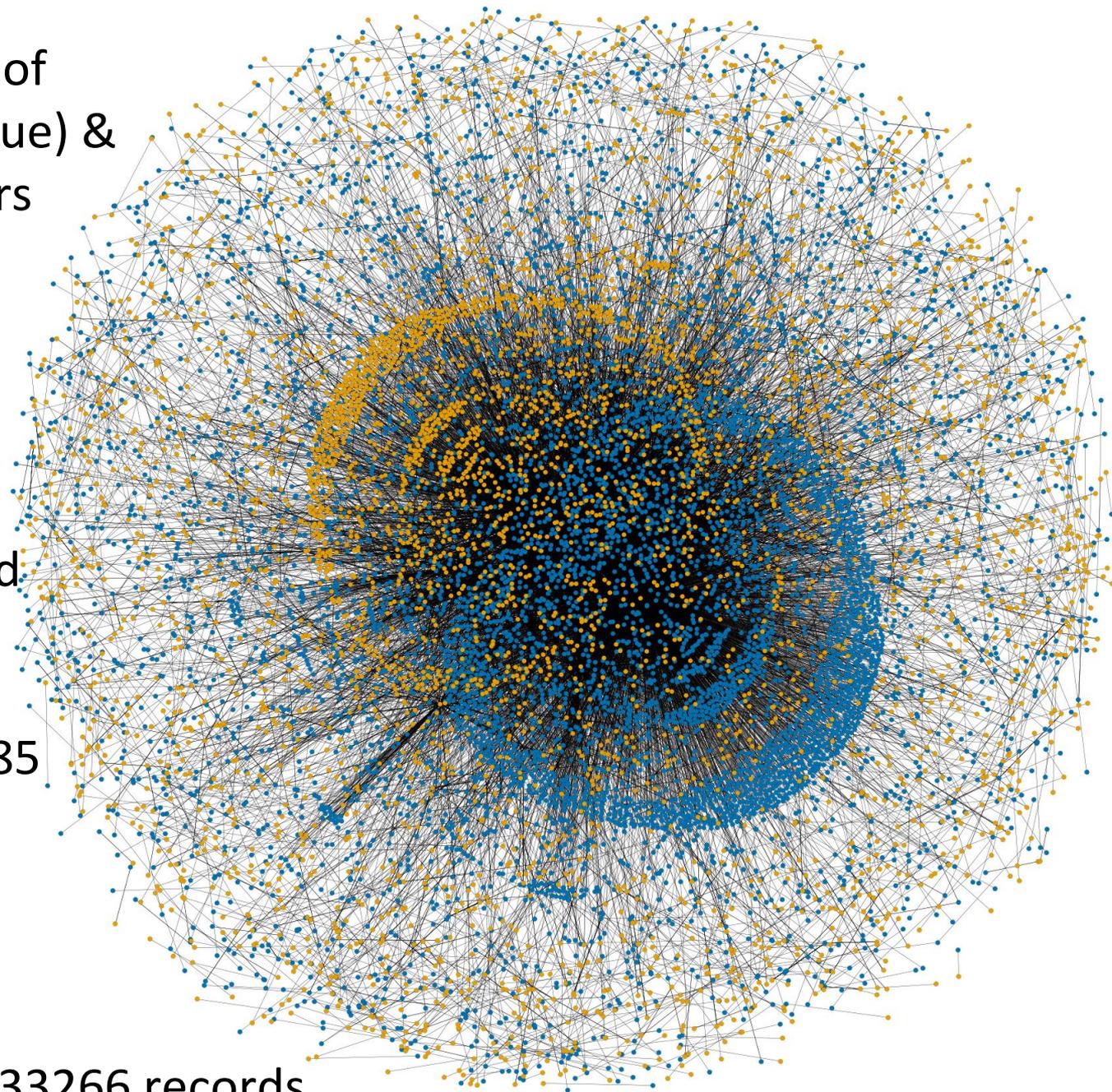
the library

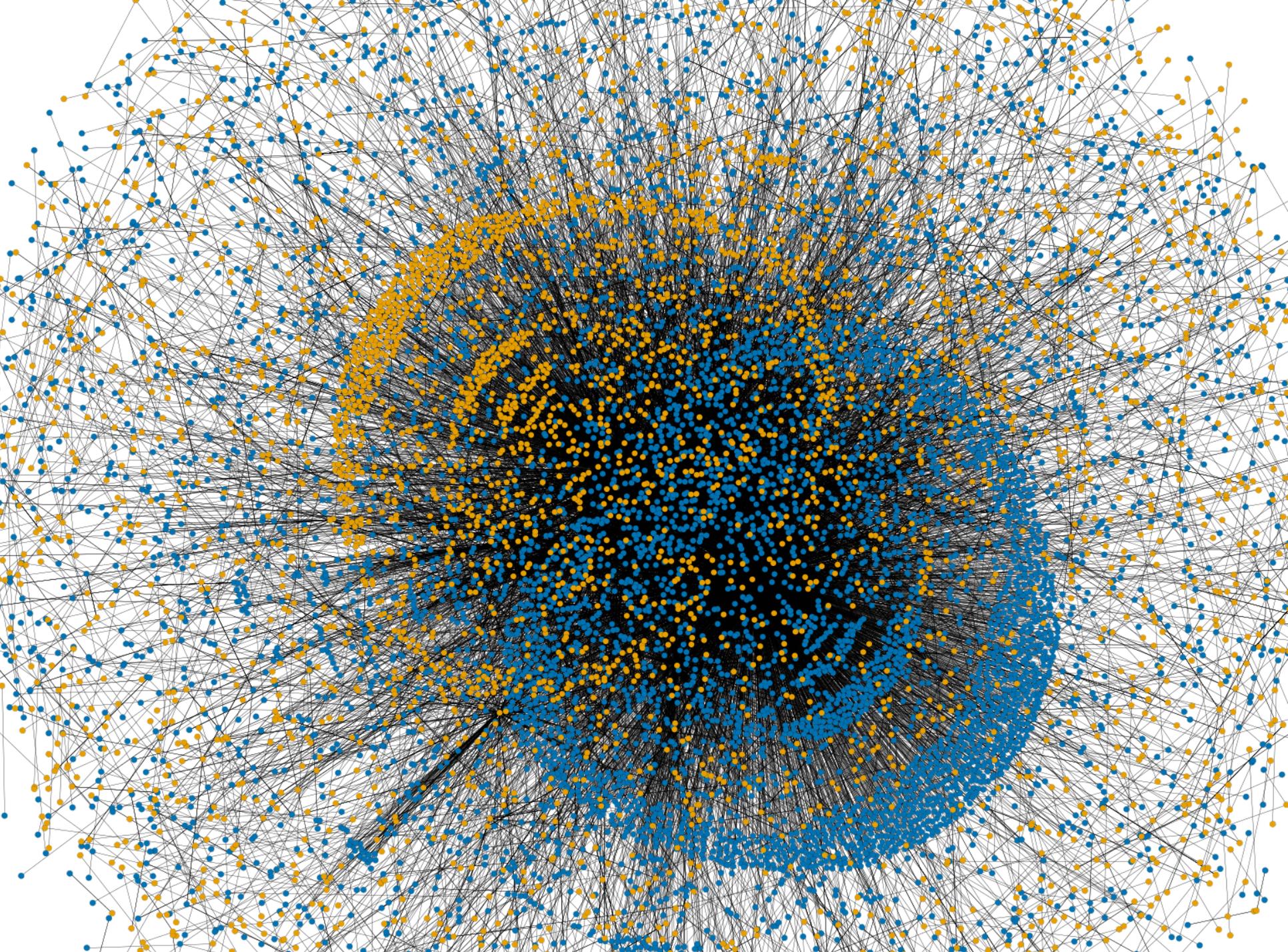
A	B	C	D	E
Adams, John	St. Malo's Quest, and other poems.	London	H.S. King & Co.	1876
Adams, R. D	The songs of the stars	London	Cassell, Petter, Galpir	1882
Adams, R. D	The songs of the stars;	London	Cassell, Petter, Galpir	1882
Adams, Walter M	Zenobia ; or, the Fall of Palmyra: a tra	London	Longmans & Co.	1870
Adams, William	Glena of the creek :	London	Longmans, Brown, Gr	1870
Adams, William	Glena of the Creek, and other poems	London	Longman	1870
Adams, William	Lyrics of Love, from Shakespeare to T	London	H.S. King & Co.	1874
Adams, William	The comic poets of the nineteenth cer	London	np	1876
Adams, William	The Comic Poets of the Nineteenth Ce	London	Routledge	1876
Adams, William	[Lyrics of Love, from Shakespeare to T	London	Kegan Paul	1878
Adams, William	Latter-day lyrics	London	Chatto & Windus	1878
Adams, William	Latter-Day Lyrics, being poems of sen	London	Chatto & Windus	1878
Adams, William	Latter-day lyrics;	London	Chatto & Windus	1878

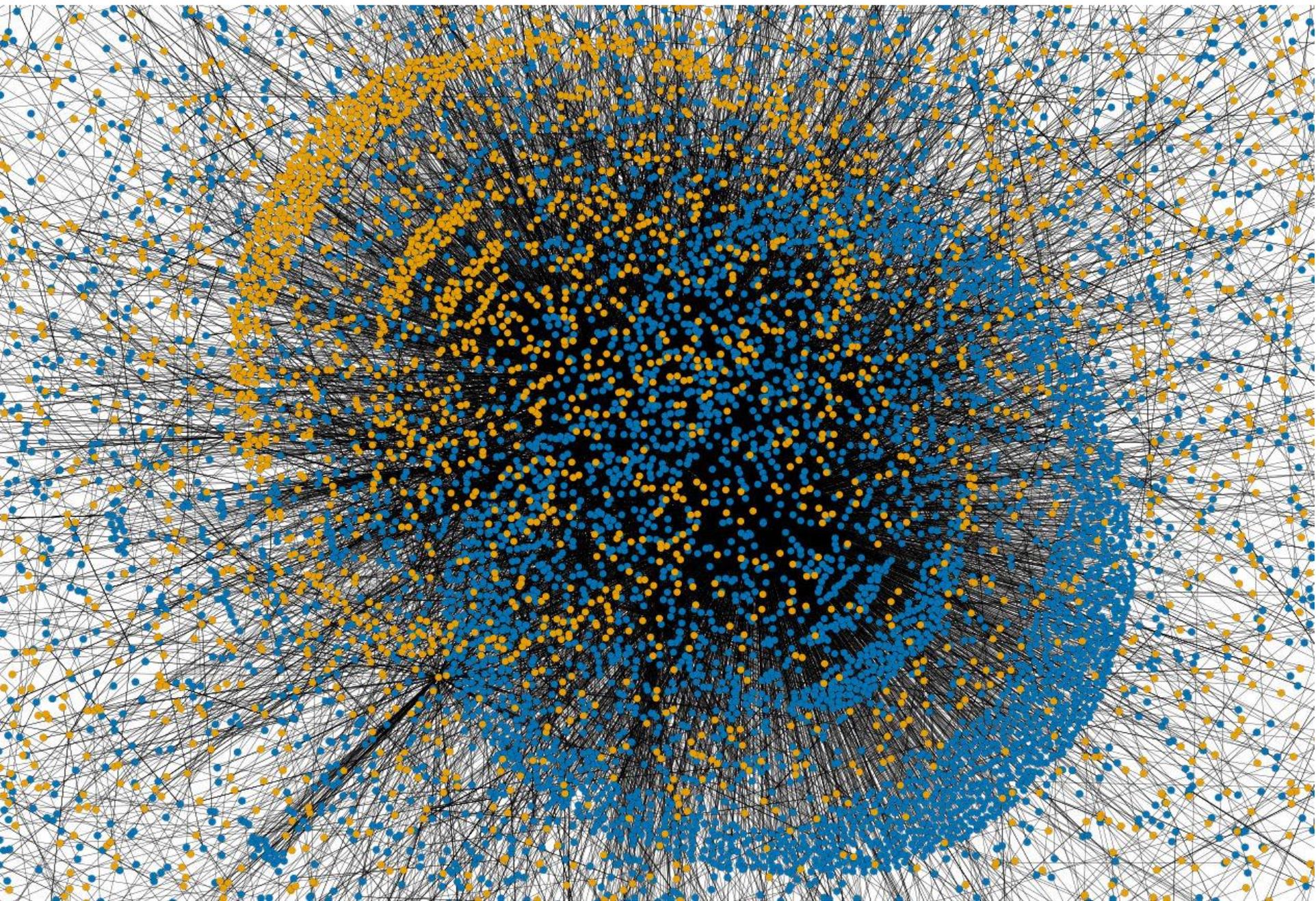
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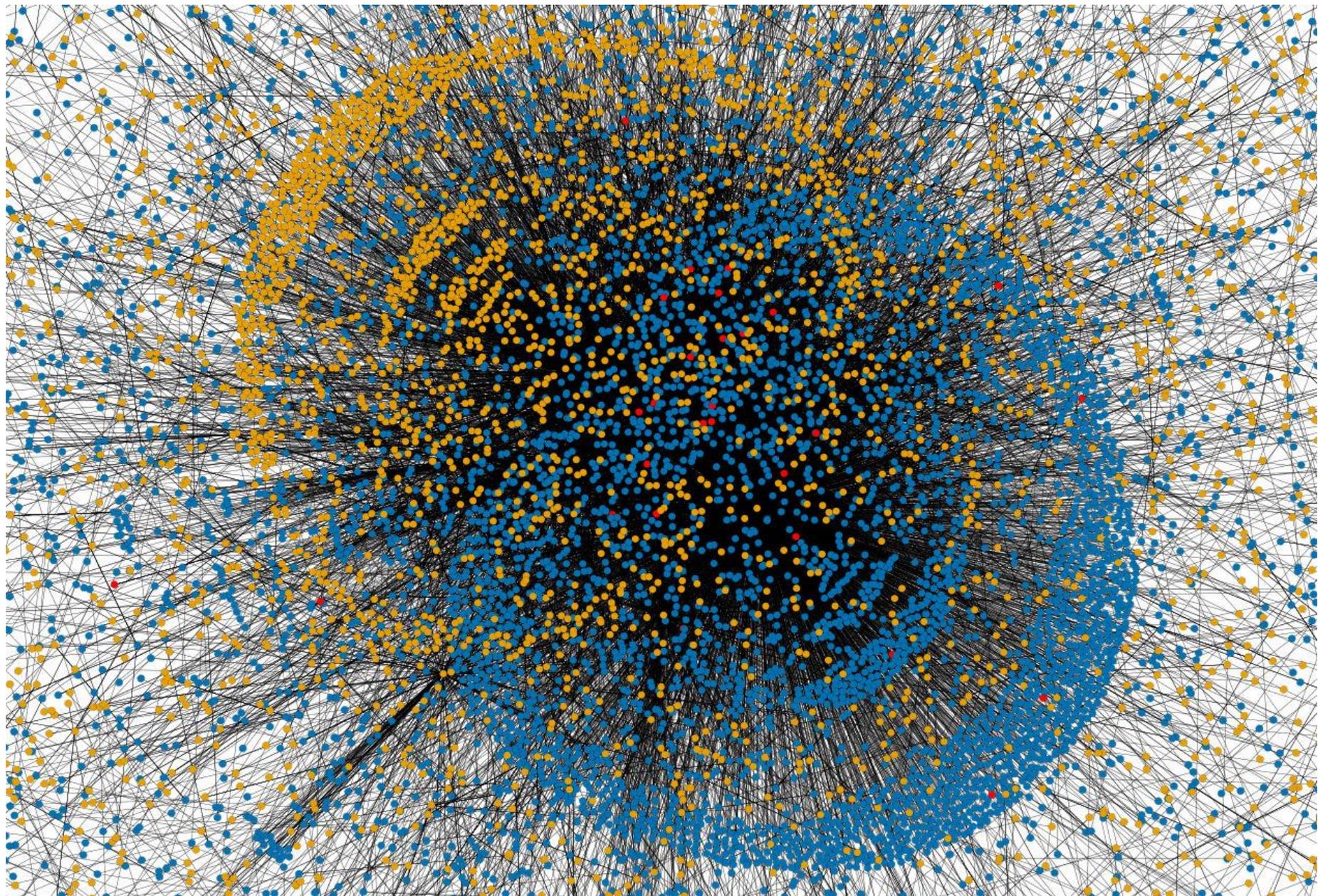




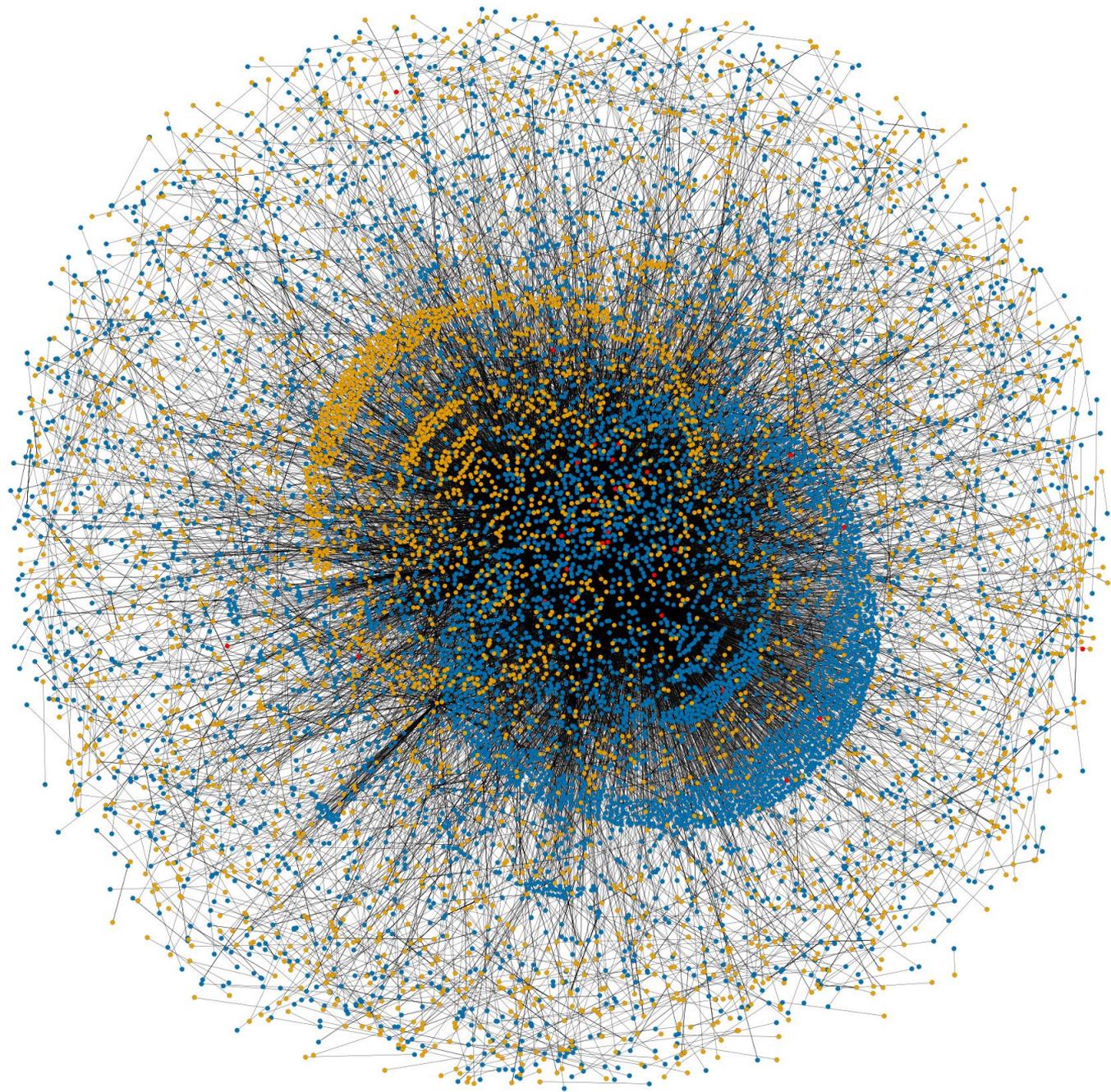


the field of Victorian poetry

- *The Penguin Book of Victorian Verse*, ed. Daniel Karlin (Penguin, 1997)
- *The Broadview Anthology of Victorian Poetry and Poetic Theory*, ed. Thomas Collins and Vivienne Rundle (Broadview Press, 1999)
- *The Broadview Anthology of Victorian Poetry and Poetic Theory, Concise Edition*, ed. Thomas Collins and Vivienne Rundle (Broadview Press, 2000)
- *Victorian Poetry*, ed. Valentine Cunningham and Duncan Wu (Blackwell Essential Literature series, 2002)
- *Victorian Poetry: An Annotated Anthology*, ed. Francis O’Gorman (Blackwell Annotated Anthologies series, 2004)



red nodes indicate poets included in 3, 4, or 5 anthologies

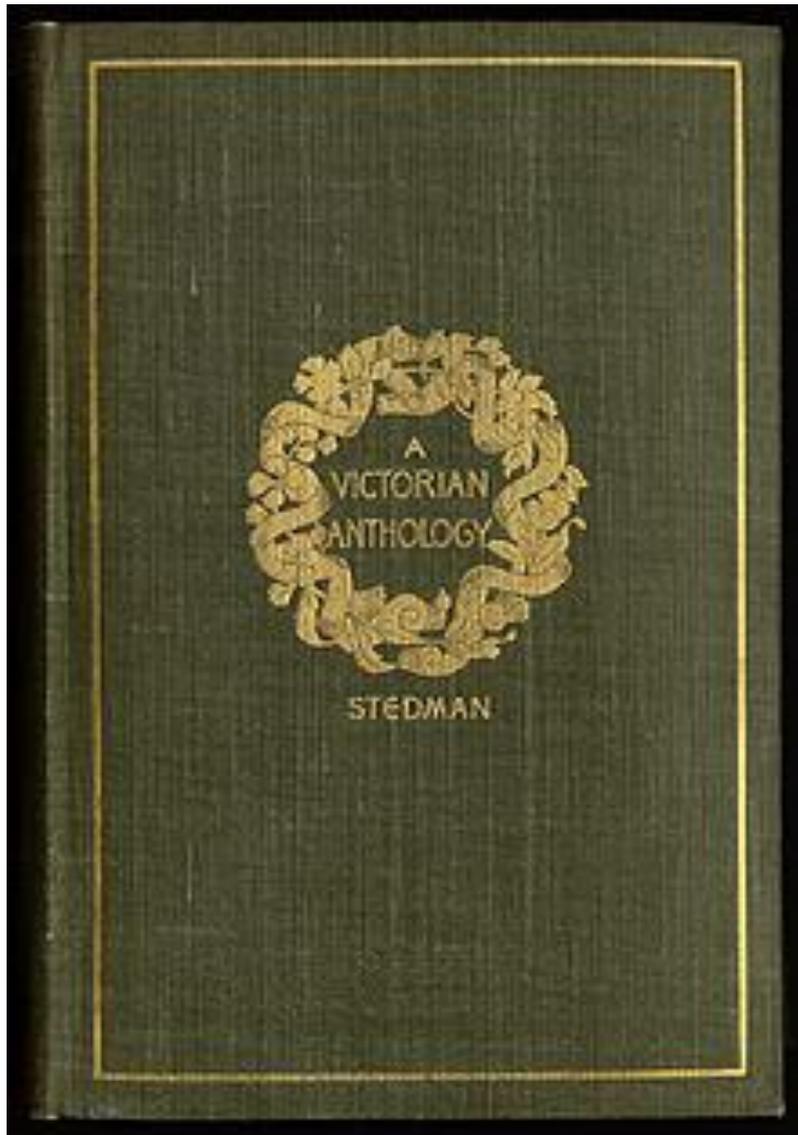


“a field this large cannot be understood by stitching together separate bits of knowledge about individual cases, because it isn’t a sum of individual cases: it’s a collective system, that should be grasped as such, as a whole”

Franco Moretti, *Graphs, Maps, Trees: Abstract Models for Literary History*

poetic style in the cultural field

- Which poetic choices serve as distinguishing markers among individual Victorian poets or groups of poets?
- Which poetic choices are more broadly observable among canonical Victorian poems?
- Which are observable in Victorian poetry beyond the canonical texts?
- How might we use such measures to chart new paths for comparative analysis?



Edmund Clarence
Stedman, ed. *A Victorian
Anthology 1837-1895.
Selections Illustrating the
Editor's Critical Review of
British Poetry in the Reign
of Victoria.* (1895)

1274 poems

343 authors

“Victorian poetry”

- A foundational representation of a literary field as an historical arc
- Stedman’s anthology includes many texts no longer part of the anthology canon

historical poetics I

- simple and relatively uncontroversial features of historical texts

poetry

- words (semantics)
- sentences (syntax)
- lines (poetics)

the poetic line

“The sense in prose flows continuously, while in verse it is segmented so as to increase information density and perceived structure.”

T. V. F. Brogan, “Line” in *The New Princeton Encyclopedia of Poetry and Poetics*

the poetic line

- Signals poetic form through number and sequence
- Audible in metrical rhythm
- Visual in print conventions of white space and indentation
- Connected /distinguished through rhyme

line features

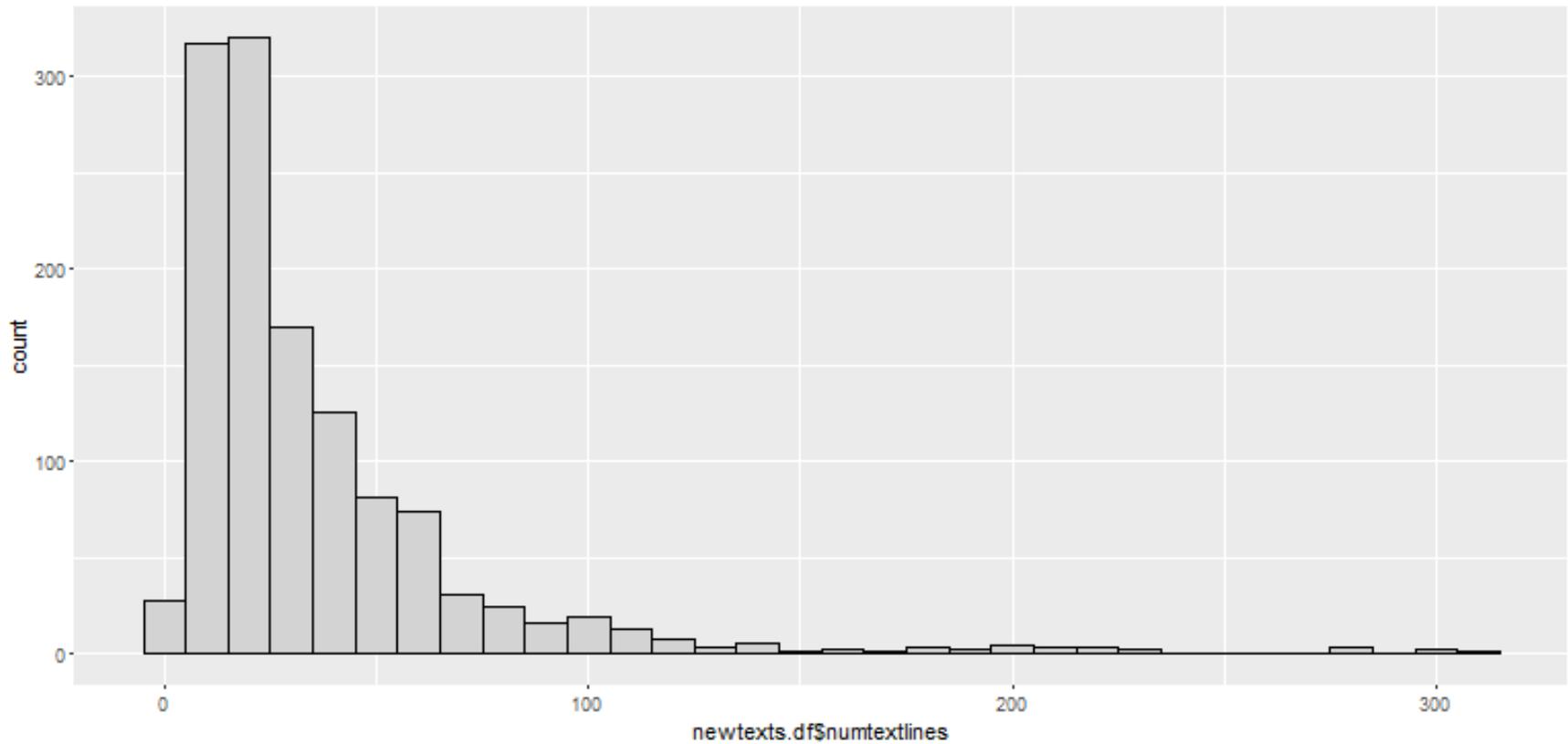
- number of lines
- number of stanzas
- sentence:line ratio

Underneath the growing grass,
Underneath the living flowers,
Deeper than the sound of showers:
There we shall not count the hours
By the shadows as they pass.

Youth and health will be but vain,
Beauty reckoned of no worth:
There a very little girth
Can hold round what once the earth
Seemed too narrow to contain.

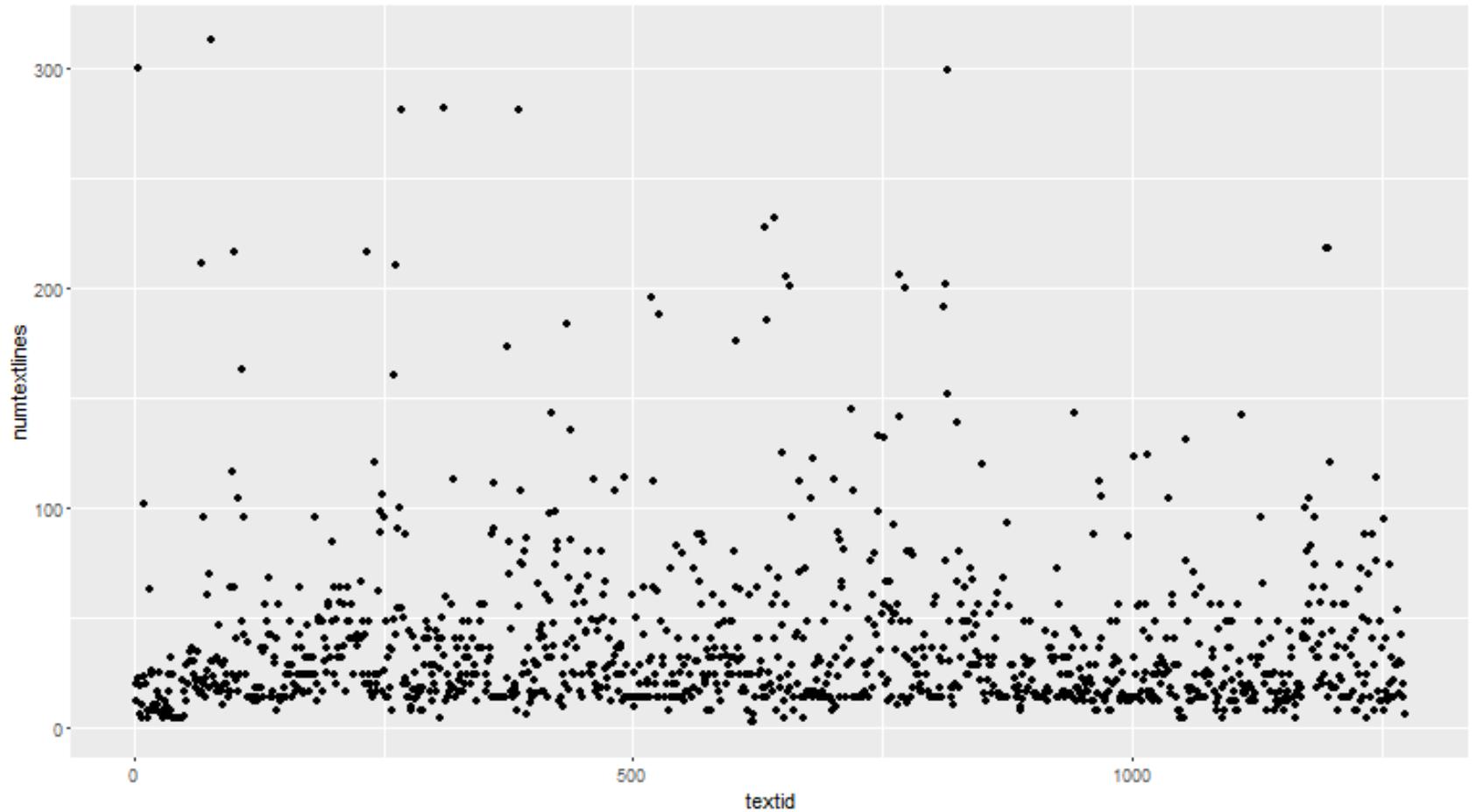
Christina Rossetti, "The Bourne"

number of lines

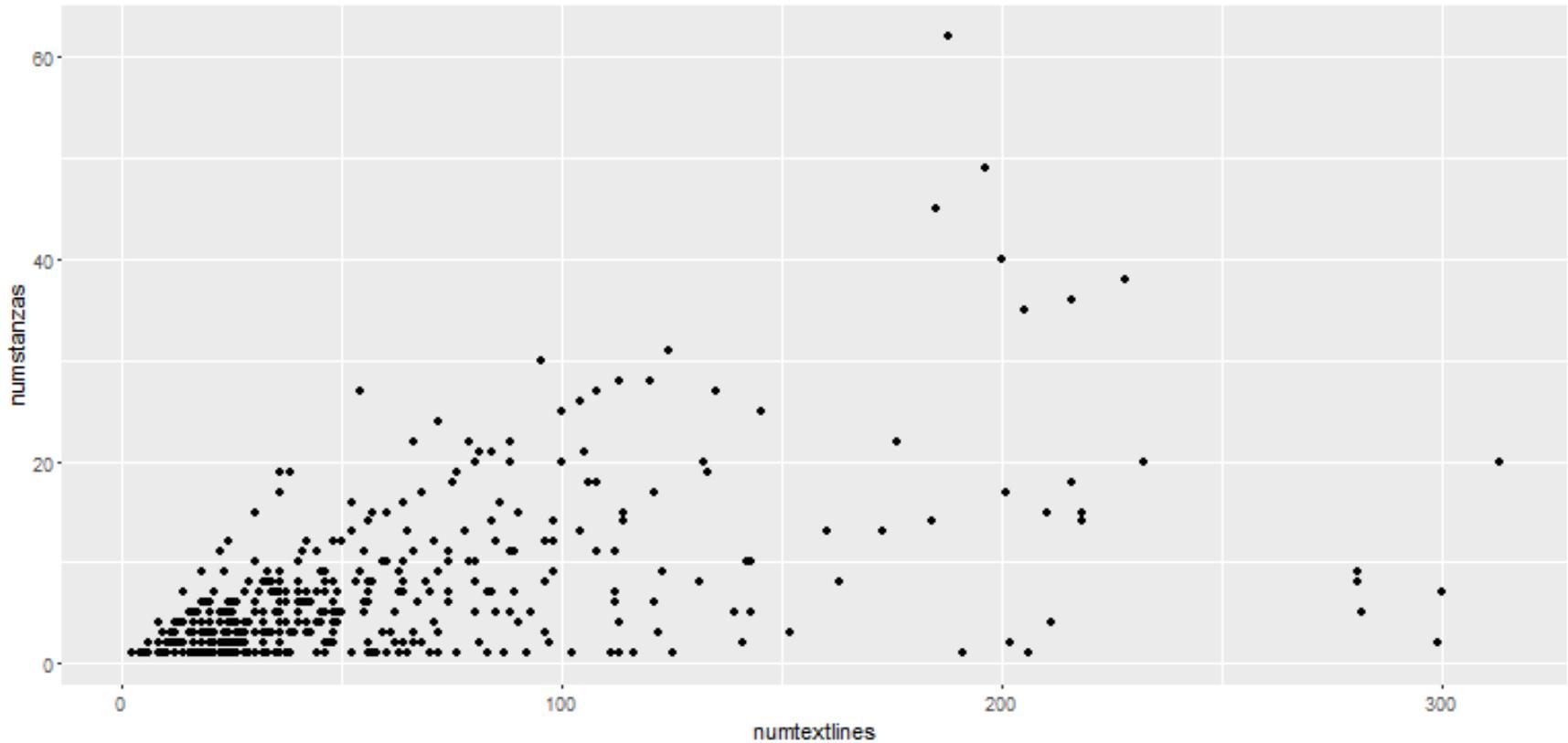


mean: 36.7

number of lines over anthology



number of lines and stanzas



enjambment

THE BOURNE.

2:10

Underneath the growing grass,
Underneath the living flowers,
Deeper than the sound of showers:
There we shall not count the hours
By the shadows as they pass.

Youth and health will be but vain,
Beauty reckoned of no worth:
There a very little **girth**
Can hold round **what once the earth**
Seemed too narrow to contain.

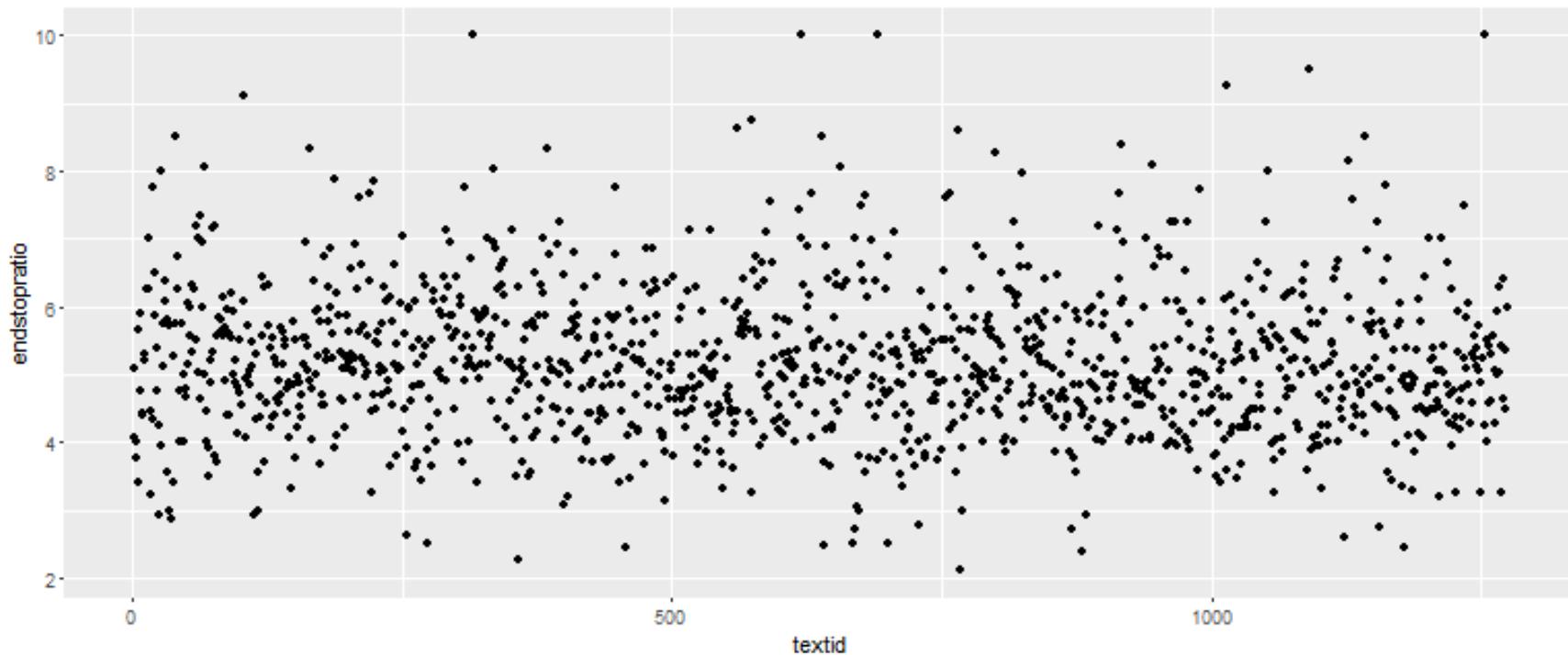
Elizabeth Barrett Browning, *Sonnets from the Portuguese V*

I lift my heavy heart up solemnly, 6: 14
As once Electra her sepulchral urn,
And, looking in thine eyes, I overturn
The ashes at thy feet. Behold and see
What a great heap of grief lay hid in me,
And how the red wild sparkles dimly burn
Through the ashen greyness. If thy foot in scorn
Could tread them out to darkness utterly,
It might be well perhaps. But if instead
Thou wait beside me for the wind to blow
The grey dust up, ... those laurels on thine head,
O my Belovèd, will not shield thee so,
That none of all the fires shall scorch and shred
The hair beneath. Stand further off then! go.

end-stop score

- 10 [. ? !]
- 8 [: ;]
- 4 [,]
- 1 [no punctuation]

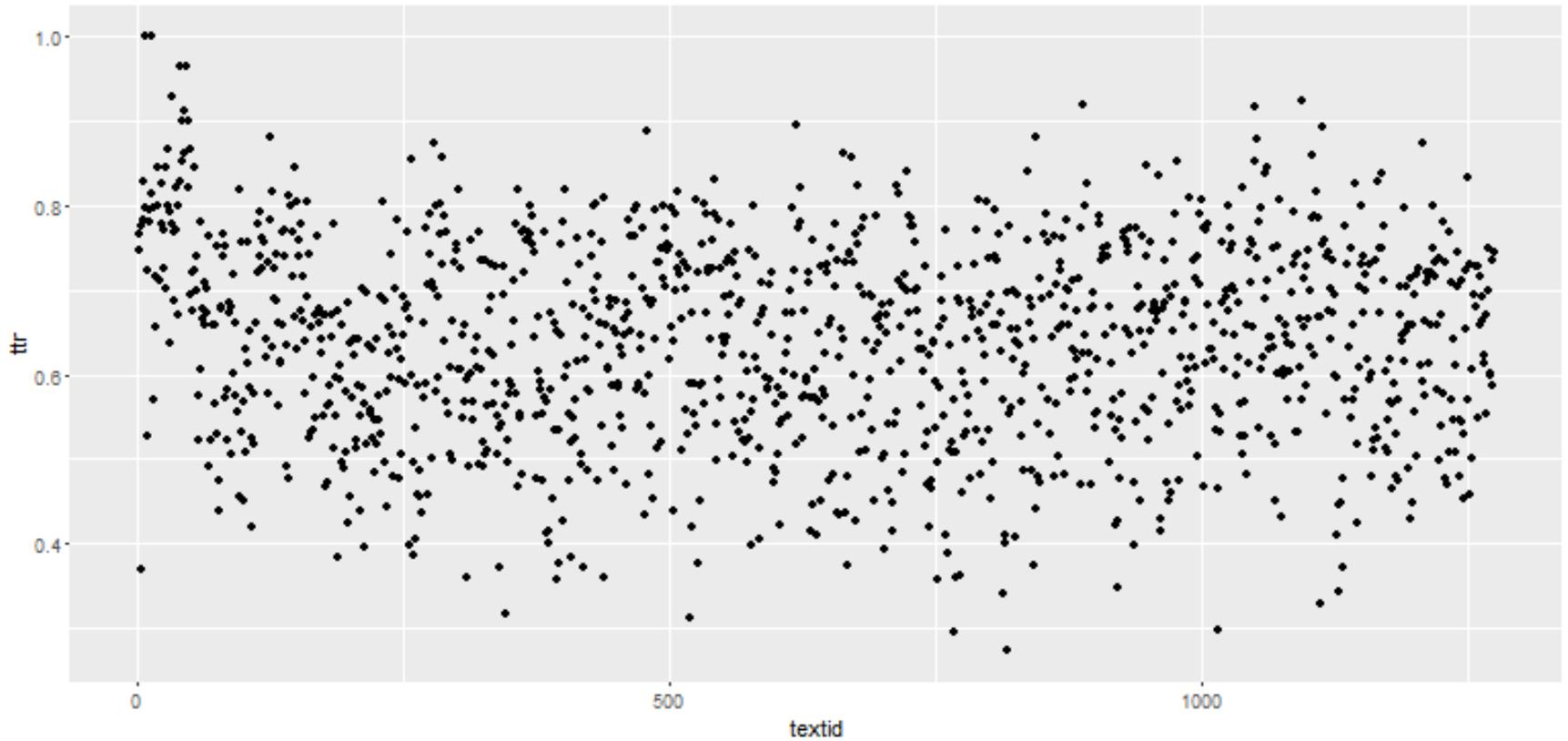
endstop ratio over anthology



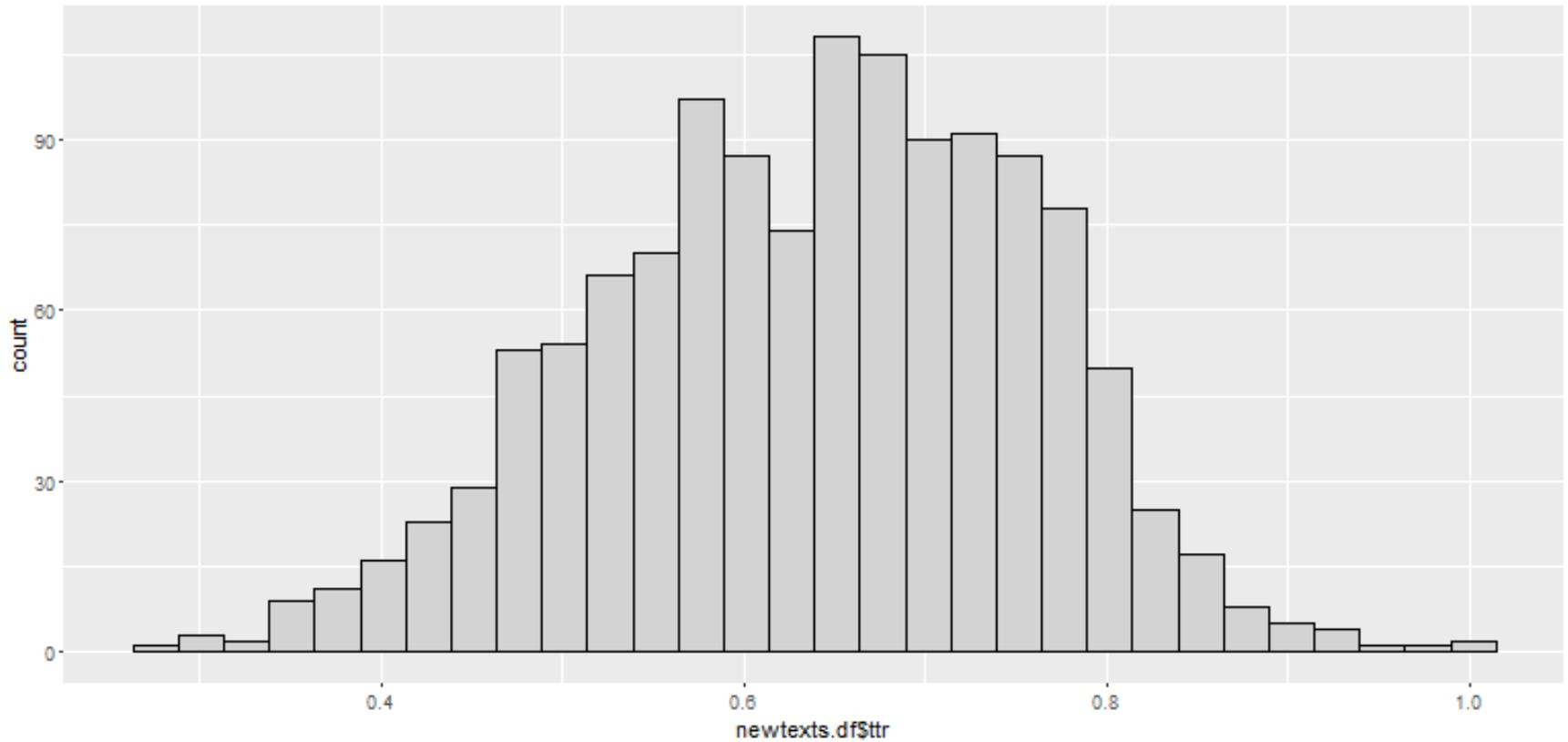
words

- type-token ratio
- repetition
- [word frequency]
- [topic modeling]

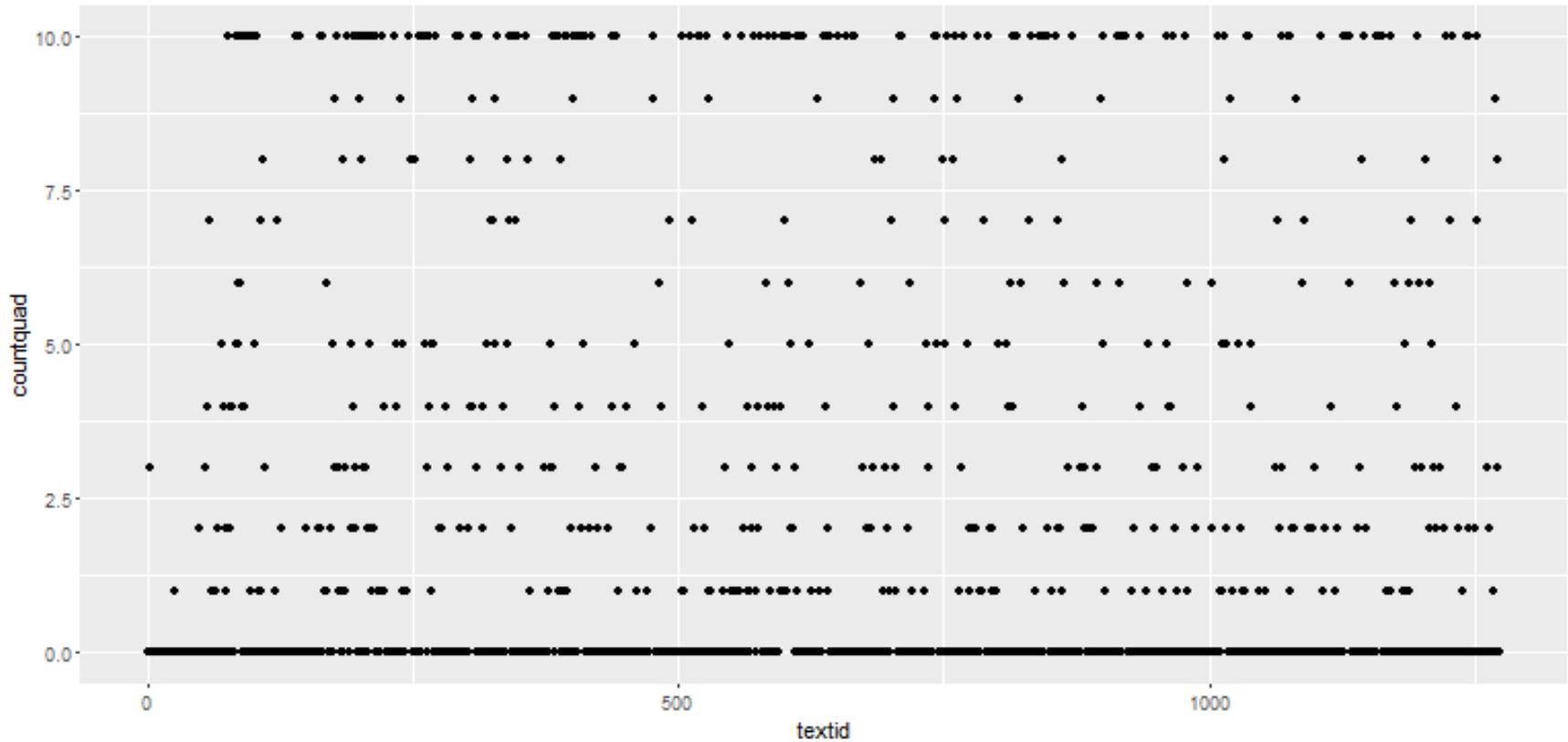
type-token ratio



type-token ratio



4grams



27% of the poems have repeated 4grams

historical poetics II

“Documents from the history of poetics . . . are inevitably saturated with all sorts of cultural idioms which can help us to connect them to the culture of which they are part and in which the people who produced, distributed, and consumed verse texts and performances lived”

Simon Jarvis, “What is Historical Poetics?”

“Perhaps the best way to think about what we do together is to view us as a lab research team (without the white coats). . . we are conducting parallel experiments in genre theory, in the history of prosody . . . Although we do not write our articles and books collectively, what we write individually emerges from the sort of research collective that is less common in the humanities these days than it is in the social and natural sciences.”

Yopie Prins, ““What is Historical Poetics?”” (2016)

“practical application is not the point of historical poetics. There are other, more interesting questions. . .”

Yopie Prins, “Historical Poetics, Dysprosody, and ‘The Science of English Verse’” (2008)

operationalizing historical poetics

- the definitions of many poetic features are historically contingent and contested
- computational approaches allow us to test different historical models of poetry over historical poetic practice

rhyme

“rhyme is the linkage in poetry of two syllables at line end . . . that have identical stressed vowels and subsequent phonemes but differ in initial consonant(s) if any are present – syllables that, in short, begin differently and end alike”

T. V. F. Brogan, “Rhyme” in *The New Princeton Encyclopedia of Poetry and Poetics*

rhyme

“the definition of what counts as rhyme is conventional and cultural”

T. V. F. Brogan, “Rhyme” in *The New Princeton Encyclopedia of Poetry and Poetics*

perfect vs near rhyme

- cat
- hat

- love
- prove

9
A
RHYMING DICTIONARY;

ANSWERING
AT THE SAME TIME, THE PURPOSES

OF
SPELLING AND PRONOUNCING
THE
ENGLISH LANGUAGE,
ON

A PLAN NOT HITHERTO ATTEMPTED.

IN WHICH

- I. The whole Language is arranged according to its TERMINATIONS.
- II. Every Word is explained and divided into SYLLABLES exactly as pronounced.
- III. Multitudes of Words liable to a DOUBLE PRONUNCIATION are fixed in their TRUE SOUNDS, by a Rhyme.
- IV. Many of the most difficult Words are rendered easy to be pronounced, by being classed according to their Endings.
- V. Numerous Classes of Words are accented in their PRONUNCIATION, by distinguishing them into Perfect, nearly Perfect, and Allowable RHYMES.

TO WHICH IS PREFIXED

A copious INTRODUCTION to the various Uses of the Work, with Critical and Practical OBSERVATIONS on Orthography, Syllabication, Pronunciation, and Rhyme;

AND,

FOR THE PURPOSE OF POETRY,

IS ADDED,

AN INDEX OF ALLOWABLE RHYMES,

WITH AUTHORITIES FOR THEIR USAGE FROM OUR BEST POETS.

By J. WALKER,

AUTHOR OF THE CRITICAL PRONOUNCING DICTIONARY, &c.

Prose, esse negotium,
Et dixim: parca potes,
Aggros, hoc arces. Terentius. Mox.

A NEW EDITION.

LONDON:

PRINTED FOR WILLIAM BAYNES AND SON, PATERNOSTER-ROW;
AND E. S. BAYNES AND CO., EDINBURGH.

1824.

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HARVARD
UNIVERSITY

John Walker, *A Rhyming Dictionary; Answering, at the Same Time, the Purposes of Spelling and Pronouncing the English Language, on a Plan not Hitherto Attempted* (1775, 1806, 1823, 1824, 1859, 1865, 1866)

Walker's dictionary

- “Index of Perfect and Allowable Rhymes” organized by rhyme syllables (ab, ace, ach)
- Each entry includes head syllable and lists of words that rhyme with it
- Cross-references to other rhyme entries
- Quotations of poetry to illustrate the “allowable” rhymes

approach

- created key-value dictionary using the head rhyme syllables as keys
- perfsyll: head rhyme, cross ref syllables, and manually extracted rhyme syllables from the listed perfect rhyme words
- perfwords: the words Walker lists in the entry
- allowsyll and allowwords for allowable rhymes

- extract final syllables and words from each poetic line
- series of lookups in Walker's dictionary:
perfect rhyme syllables, perfect rhyme words,
allowable syllables, allowable rhyme words
- final attempt to match unmatched syllables
looks for perfect matches within the poem
text

- produces rhyme pattern conventionally coded as ABABCDCD
- list of rhyme syllables and rhyme words
- percentage of perfect or allowable rhymes used

“rhyme was a shared idiom, without which the lyric was all but unthinkable. To that extent, a rhymed poem did not really represent, in any useful sense, a *decision* to use rhyme.”

Peter McDonald, *Sound Intentions: The Workings of Rhyme in Nineteenth-Century Poetry*

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95% of the poems in Stedman are rhymed

- rhyme dictionaries are both descriptive and prescriptive, thereby closely connected to the poetic idiom of rhyme
- offers an indirect approach to historical and national English pronunciation differences
- null matches can point to distinctive authorial styles or to inconsistencies in the source dictionary

- Prevalence of rhyme
- Discovering prevalence of particular rhyme patterns
- Discovering structured poetic forms
- Exploring the idiom of rhyme

most frequent rhyme words

- me
- day
- sea
- thee
- be
- away
- night
- love
- again
- dead
- there
- more
- eyes
- see

Other rhyme dictionaries

- J. E. Carpenter *A Handbook of Poetry* (1868)
- Tom Hood *The Rules of Rhyme* (1869)
- Samuel W. Barnum *A Vocabulary of English Rhymes, Arranged on a New Plan* (1876)
- John Longmuir *Rhythmical Index to the English Language* (1877)
- R. F. Brewer *Orthometry: A Treatise on the Art of Versification* (1893)
- Andrew Loring *The Rhymer's Lexicon* (1905).

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“unquestioned representations of ‘what is’ . . . need to be subjected to a radical critique to return the humanistic tenets of constructedness and interpretation to the fore.”

Johanna Drucker, “Humanities Approaches to Graphical Display”

- Poetics exists at the intersection of the quantitative and the subjective
- Part of the literary context we don't yet understand at the large scale