Encoding sonic devices: what is it good for?

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Outline

- The *Digital Victorian Periodical Poetry* Project (dvpp.uvic.ca)
- What we encode and how we encode it
- Potential uses for sonic device encoding

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BETA

DIGITAL VICTORIAN PERIODICAL POETRY

Welcome!

Digital Victorian Periodical Poetry explores the poetry most read in the long Victorian period: poems published in periodicals, magazines, and newspapers. Our collection currently contains 15548 poems dating from 1817 to 1901. Here are some subcollections you might want to explore.

Women Poets

Historiated Initials

Women Illustrators

Fairies

Prolific Poets

Animals

Tennyson

Reading

Scottish Poets

DVPP Stats

- 21 periodicals, magazines and newspapers from 1817 to 1901
- 15548 poems with metadata, page-images and description
- 2181 poems of these are fully transcribed and encoded

All poems in all decade-years (1820, 1830, 1840…) are fully encoded, along with a few poems scattered across other years.

Sound in Victorian poetry is variously vocalized, visualized, represented, mediated, and embodied in Victorian poetry. And sound in Victorian poetry is also at once material (and materialized in voice) as well as transcendent, present and absent, near and far, shared and solitary. The frequent figuring of sound as echoic makes these dynamics clear, as the repetitive and persistent sonic patterns weave through poetry to ask us where the sound is materialized from, and where it's going. And that sense of echoic sound's restless movement becomes especially important at scale, when we work with thousands of Victorian poems that share the various rhythms of ephemeral print culture and its soundscape.

Alison Chapman, "The Soundscape of Victorian Poetry," 2022.

What we encode

Rhyming line-ends and rhyme-schemes (abab…)

Rhyme types (masculine, feminine, dactylic…)

Inline/cross-line sonic devices (anaphora, epistrophe, refrain…)

Rhyme tagging

```
<lg rhyme="aabb">
  <l>Who is the Patriot, who is
    <rhyme type="dvpp:rhymeMasculine" label="a">he</rhyme>, </l>
  <l>When slaves are struggling to be
    <rhyme type="dvpp:rhymeMasculine" label="a">free</rhyme>,</l>
  <l>Freedom's best-beloved, may
    <rhyme type="dvpp:rhymeMasculine" label="b">claim</rhyme></l>
  <l>To bear her holiest
    Ori<rhyme type="dvpp:rhymeHalf" label="b">flamb</rhyme>?</l>
</lg>
<lg rhyme="ccaa">
  <l>He who joineth hands with
    <rhyme type="dvpp:rhymeFeminine" label="c">Power</rhyme>,</l>
  <l>When the anarch would
    de<rhyme type="dvpp:rhymeFeminine" label="c">vour</rhyme></l>
  <l>Trampled Right insurgent ? –
    <rhyme type="dvpp:rhymeMasculine" label="a">He</rhyme></l>
  <l>Is no friend of
    Liber<rhyme type="dvpp:rhymeSyllabic" label="a">ty</rhyme>.</l>
</lg>
```

Dominant rhyme-scheme

<head>Hymns for the Unenfranchised.</head>

<lg rhyme="aabb">

<l>Who is the Patriot, who is <rhyme type="dvpp:rhymeMasculine" label="a">he</rhyme>, </l>

....

Other sonic devices

- **sdAnaphora**: repeating the first part of a line
- **sdEpistrophe**: repeating the last part of a line
- **sdRefrain**: repeating one or more lines (or even a partial line in some cases)
- **sdInternal rhyme**: rhyme that is not at line-ends

Each of these can be qualified with **sdVariant** to signify that the repetition is not exact.

Anaphora

```
<lg>
   <l><seg ana="dvpp:sdAnaphora">Enough to</seg>
      garner in the rich man’s store,</l>
   <l><seg ana="dvpp:sdAnaphora">Enough to</seg>
      give the reaper ample hire,</l>
   <l><seg ana="dvpp:sdAnaphora">Enough to</seg>
      feed the meek and patient poor,</l>
   <l><seg ana="dvpp:sdAnaphora dvpp:sdVariant">Enough for</seg>
      every Christian heart’s desire.</l>
</lg>
```

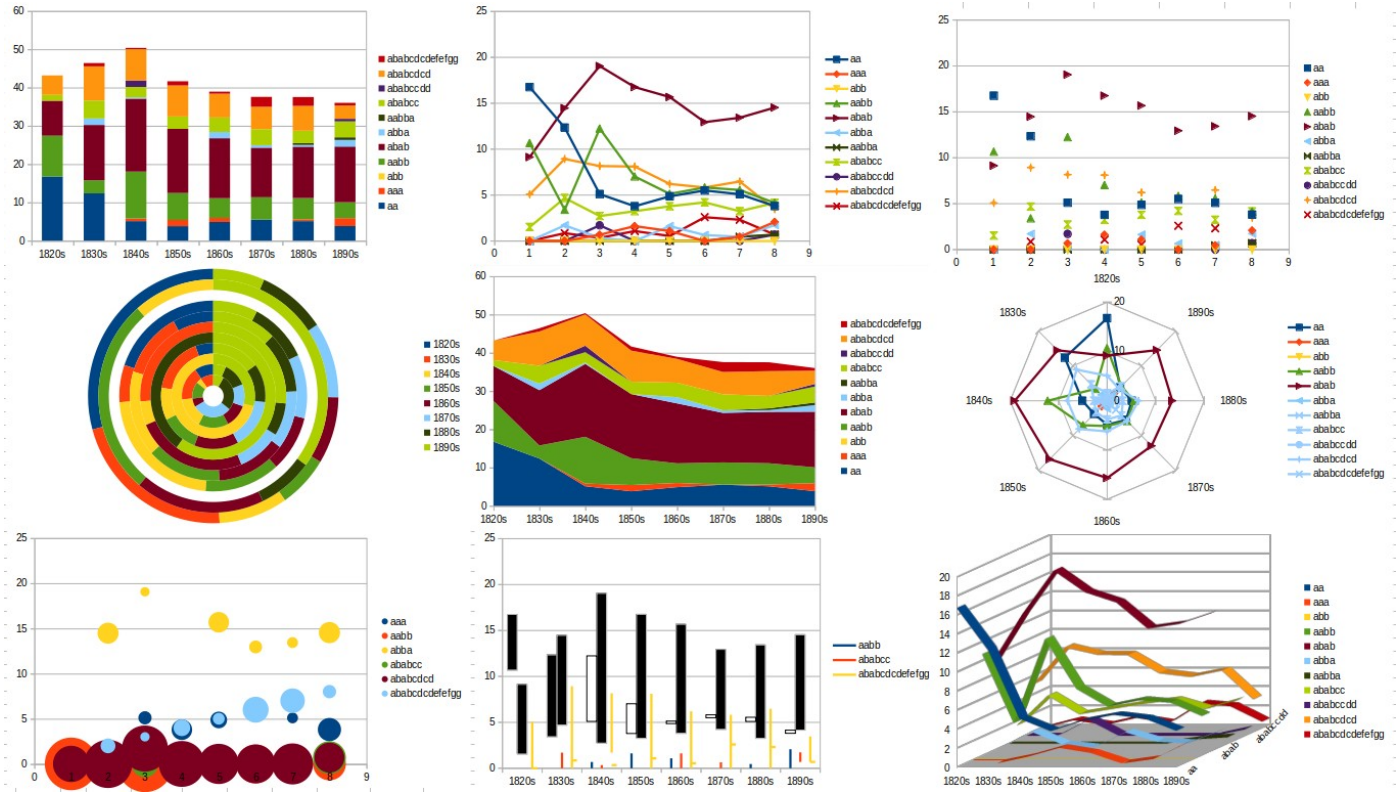
Epistrophe

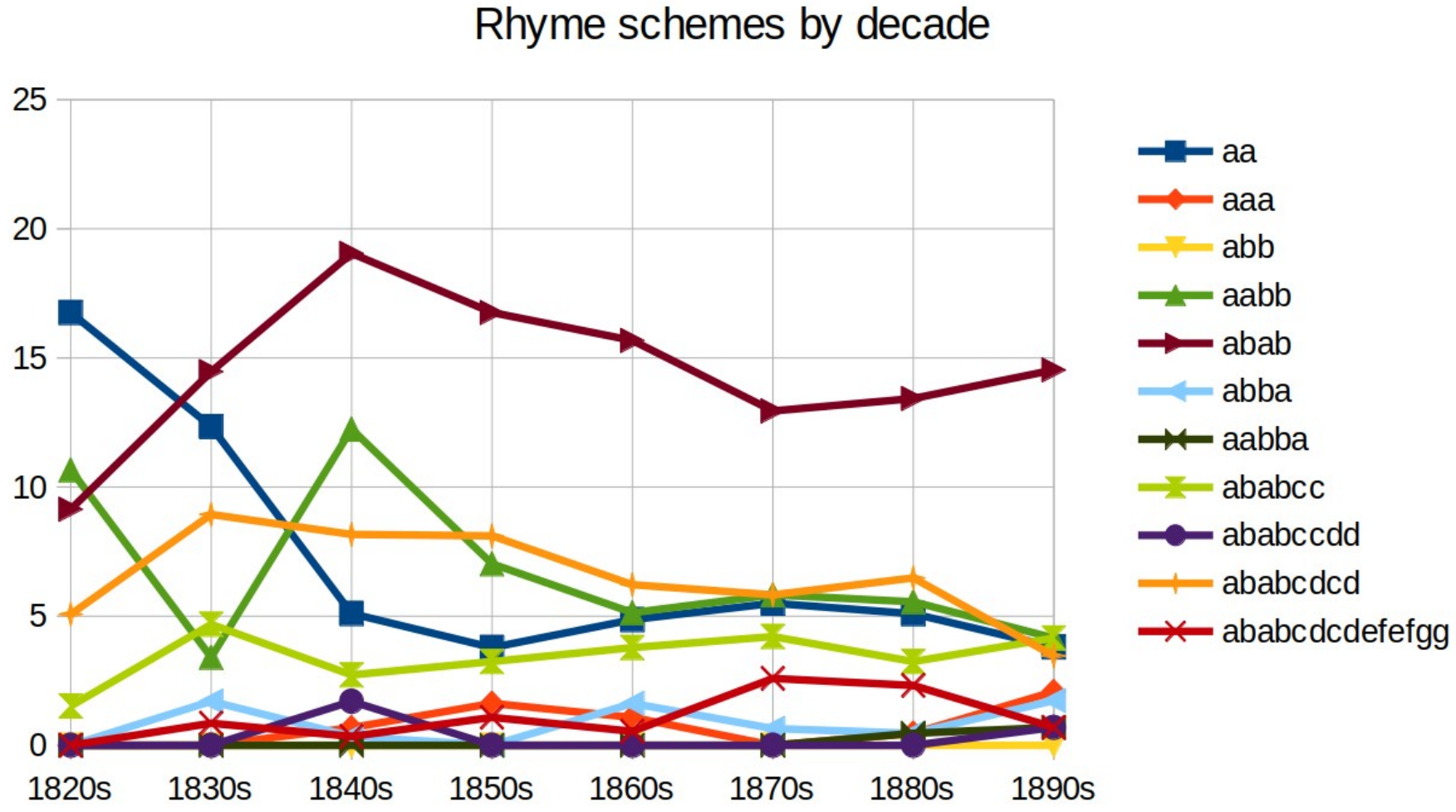
<l>“ Now we are free, <seg ana="dvpp:sdEpistrophe">now we are <rhyme type="dvpp:rhymeMasculine" label="b">free</rhyme></seg>,</l>

<l>We seven sisters <seg ana="dvpp:sdEpistrophe dvpp:sdVariant">now are <rhyme type="dvpp:rhymeIdentical" label="b">free</rhyme></seg>,</l>

What can we do with this encoding now we have it?

1. Stats!


ababcdcdefegg
ababcdcd
ababccdd
ababcc
aabba
abba
abab
aabb
abb
aaa
aa
1820s
1830s
1840s
1850s
1860s
1870s
1880s
1890s


Rhyme schemes by decade
25
20
15
10
5
0
1820s
1830s
1840s
1850s
1860s
1870s
1880s
1890s
aa
aaa
abb
aabb
abab
abba
aabba
ababcc
ababccdd
ababcdcd
ababcdcdefefgg

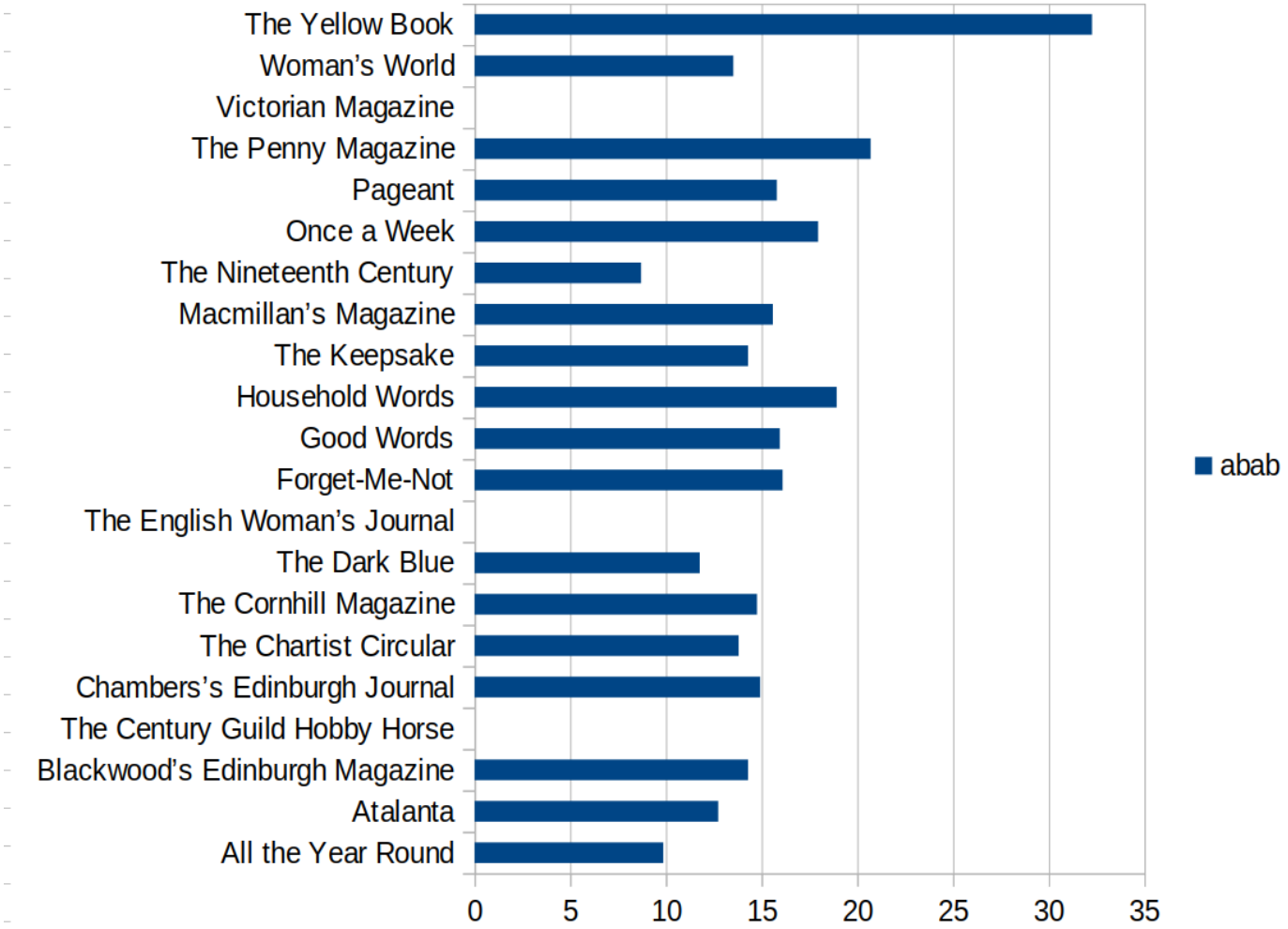
Is the rhyming couplet in decline?

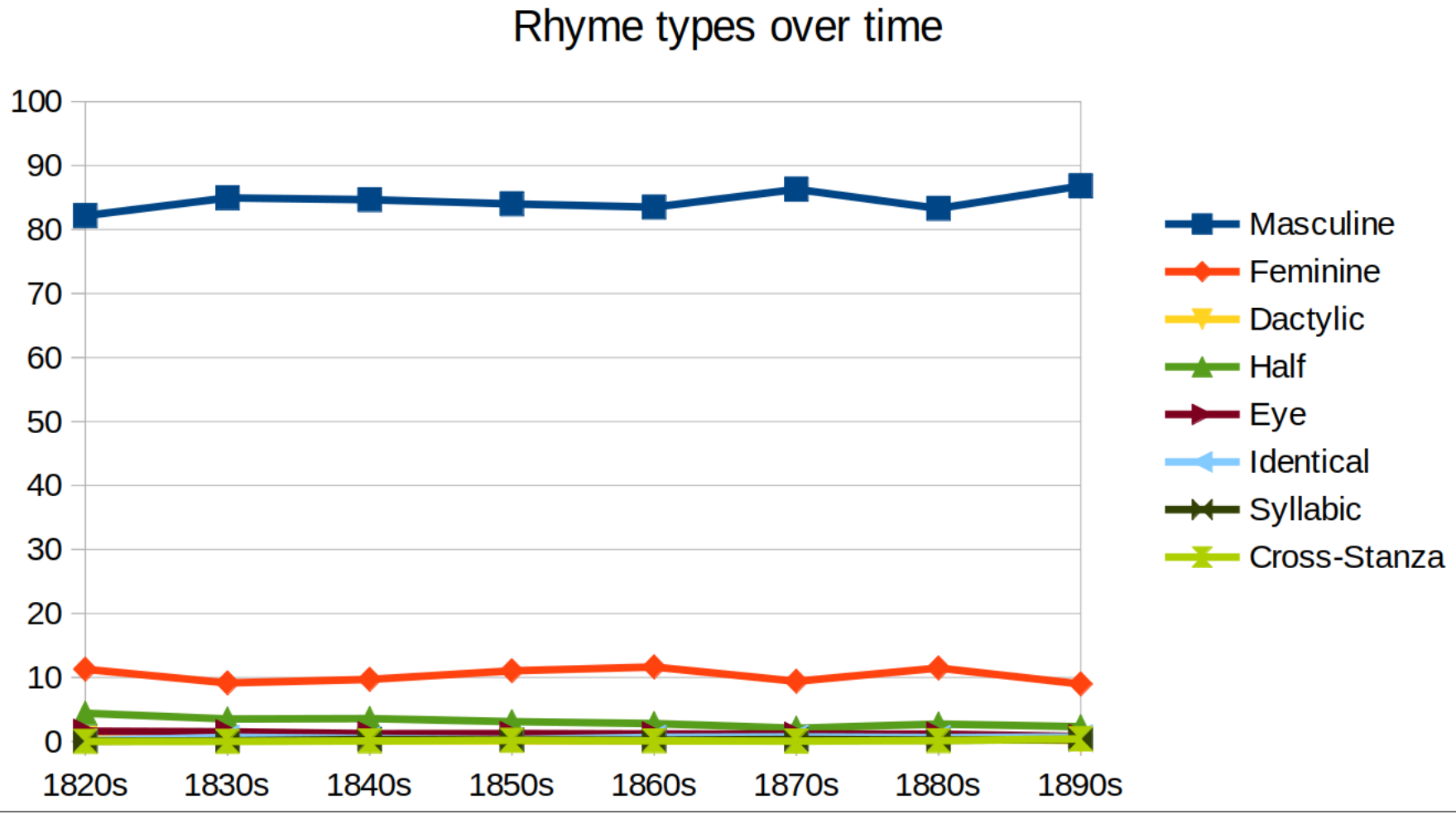
Not so fast.

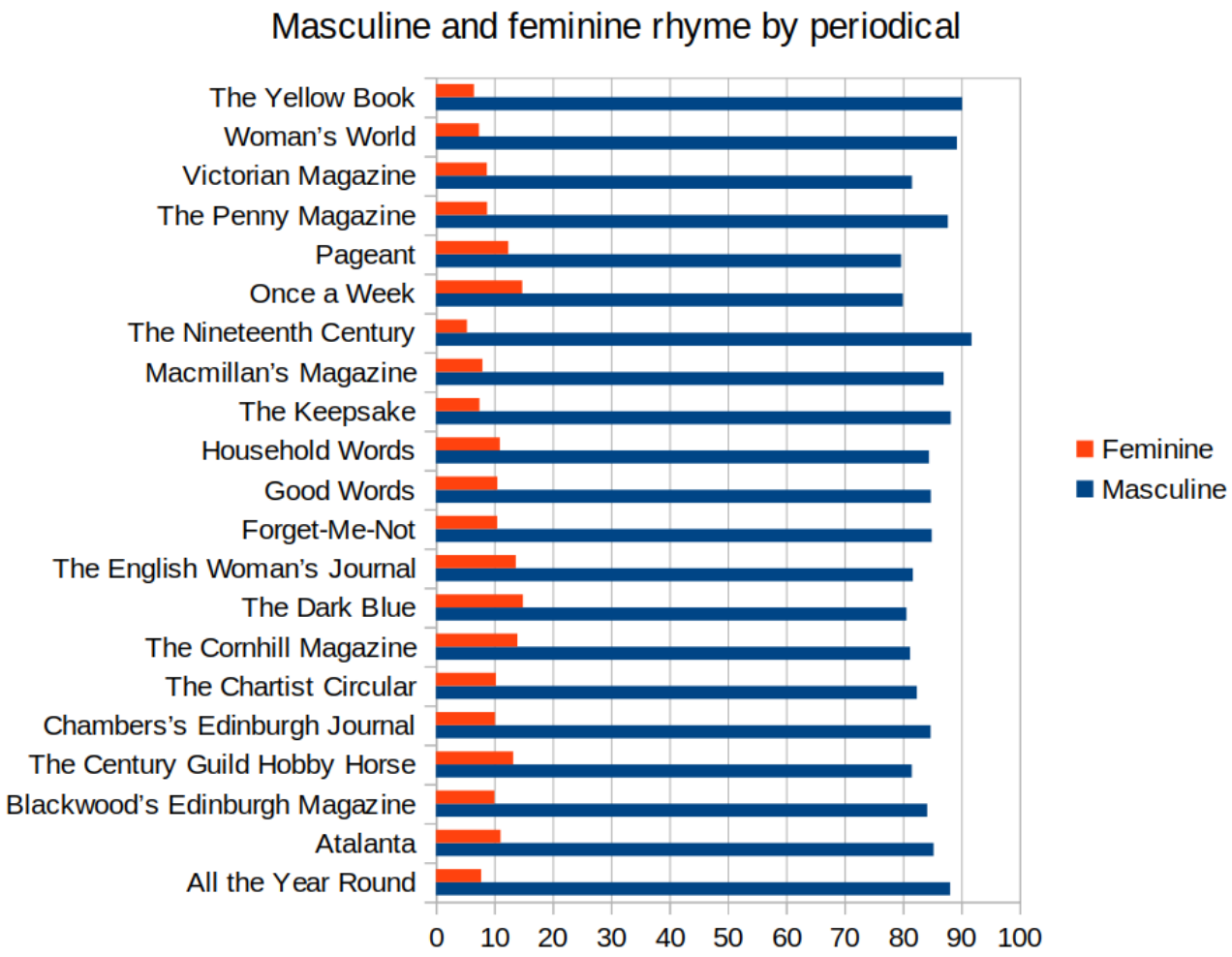
61 out of 62 “aa”-scheme poems published before 1840 are in a single periodical, Blackwoods.

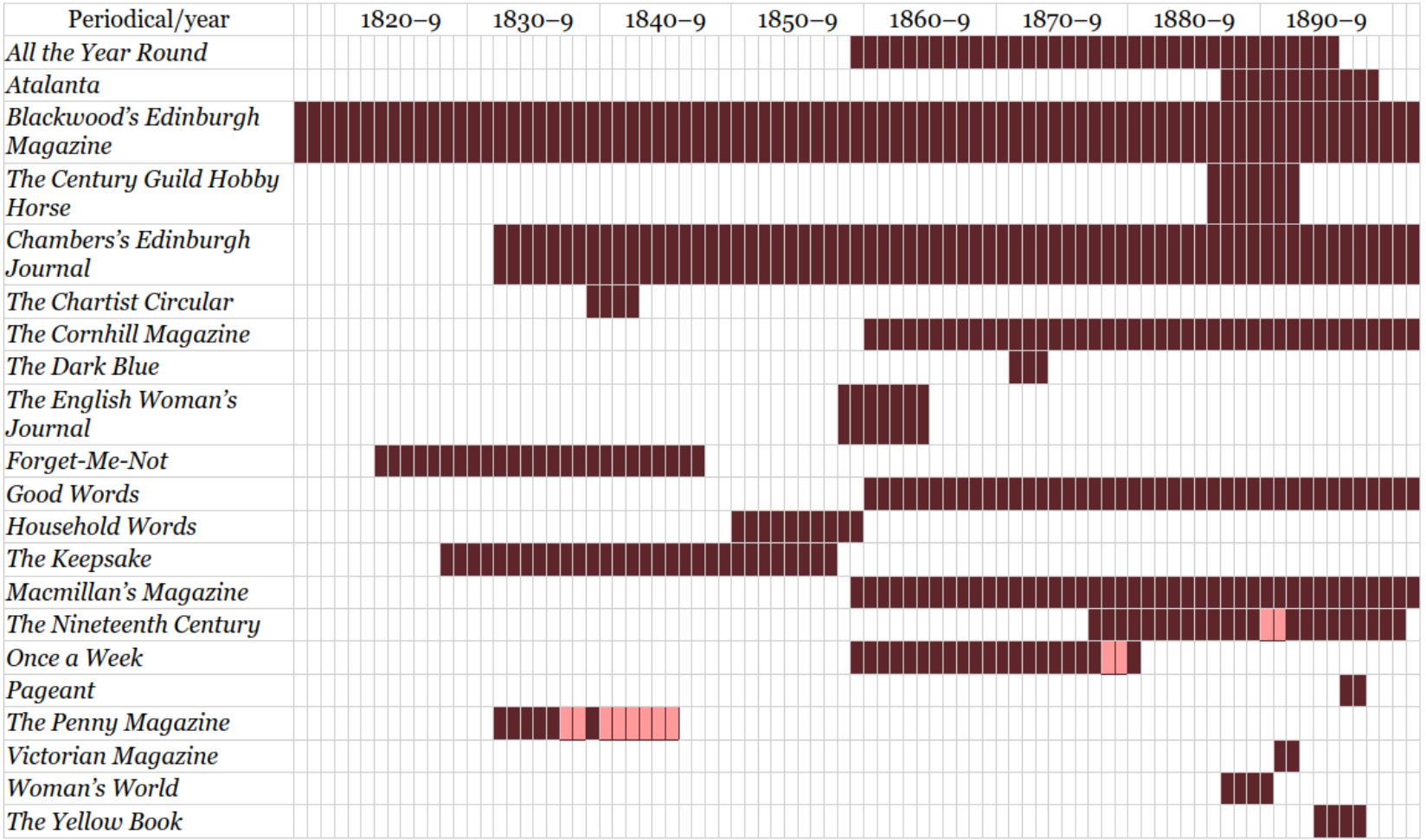
During this period, Blackwoods was a fiercely satirical Tory campaigning publication.

Much of the poetry was comical satire full of in-jokes written by a small coterie of insiders; the couplet form works well for comic effect.


The Yellow Book
Woman's World
Victorian Magazine
The Penny Magazine
Pageant
Once a Week
The Nineteenth Century
Macmillan's Magazine
The Keepsake
Household Words
Good Words
Forget-Me-Not
The English Woman's Journal
The Dark Blue
The Cornhill Magazine
The Chartist Circular
Chambers's Edinburgh Journal
The Century Guild Hobby Horse
Blackwood's Edinburgh Magazine
Atalanta
All the Year Round
0
5
10
15
20
25
30
35
abab


Rhyme types over time
100
90
80
70
60
50
40
30
20
10
0
1820s
1830s
1840s
1850s
1860s
1870s
1880s
1890s
Masculine
Feminine
Dactylic
Half
Eye
Identical
Syllabic
Cross-Stanza


Masculine and feminine rhyme by periodical
The Yellow Book
Woman's World
Victorian Magazine
The Penny Magazine
Pageant
Once a Week
The Nineteenth Century
Macmillan's Magazine
The Keepsake
Household Words
Good Words
Forget-Me-Not
The English Woman's Journal
The Dark Blue
The Cornhill Magazine
The Chartist Circular
Chambers's Edinburgh Journal
The Century Guild Hobby Horse
Blackwood's Edinburgh Magazine
Atalanta
All the Year Round
0
10
20
30
40
50
60
70
80
90
100
Feminine
Masculine


Periodical/year
1820–9
1830–9
1840–9
1850–9
1860–9
1870–9
1880–9
1890–9
All the Year Round
Atalanta
Blackwood's Edinburgh Magazine
The Century Guild Hobby Horse
Chambers's Edinburgh Journal
The Chartist Circular
The Cornhill Magazine
The Dark Blue
The English Woman's Journal
Forget-Me-Not
Good Words
Household Words
The Keepsake
Macmillan's Magazine
The Nineteenth Century
Once a Week
Pageant
The Penny Magazine
Victorian Magazine
Woman's World
The Yellow Book

Stats: pretty but not illuminating

This stuff is tempting but dangerous.

There are too many variables to draw meaningful conclusions.

2. Rhyming dictionary

Rhyming dictionaries are often used in analysis (e.g. Kilner and Fitch 2017).

Historical rhyming dictionaries are encoded as primary sources (e.g. Stein 2017).

But the rhyming dictionaries used or offered are basically prescriptive; they tell us what *should* rhyme.

With a corpus of encoded rhyme, we could generate a dictionary of what *does rhyme* or what *is rhymed* by poets during this period.

“What Rhymes With” is an Oxygen transformation scenario that takes a word as input and retrieves all its rhymes from the corpus.

What rhymes with “poet”?

SAME-STANZA RHYMES FOR "**poet**"

know it (label = b; pom_3671_the_poet)

know it (label = j; pom_1859_making_poetry)

know it (label = s; pom_10187_maga_at_no_45)

show it (label = u; pom_11948_a_forced_recruit_at_solferino)

throw it (label = e; pom_13766_sop_and_the_philosopher)

What rhymes with “charm”?

SAME-STANZA RHYMES FOR "charm" (selection)

arm (label = b1; pom_2016_the_two_margarets_iimargaret)
dis | arm (label = b; pom_4781_to_woman_from_the_above)
farm (label = b; pom_7250_the_delaying_spring)
harm (label = b; pom_7250_the_delaying_spring)
form (label = q1; pom_8535_the_wile_of_juno_iliad_14_line)
per | form (label = q1; pom_8535_the_wile_of_juno_iliad_14_line)
storm (label = d; pom_7242_shetland)
warm (label = f; pom_9918_epitaph_on_dyonisia)

SAME POEM BUT DIFFERENT STANZA RHYMES FOR "charm"

dis | arm (label = b1; pom_2016_the_two_margarets_iimargaret)
harm (label = b1; pom_2016_the_two_margarets_iimargaret)
warm (label = r; pom_363_winter)

But can we actually build a conventional rhyming dictionary this way?

river →

ever →

stronger →

lower →

flower →

pour → …

3. Form and genre detection

What do you call a poem with one stanza and this rhyme-scheme?

ababcdcdefefgg

However…

Among the **28** encoded poems in our collection which actually have the word “Sonnet” in the title, there are **19** different rhyme-schemes.

Among the **233** encoded poems which consist of a single 14-line stanza, there are **96** distinct rhyme-schemes.

Same rhyme-scheme?

ababcdcd**efefgg**

ababcdcd**aeaeff**

Life is, as usual, more complicated that we would wish.

We can auto-detect some stanza forms:

- Couplet
  - Heroic couplet
  - Split couplet
  - Open couplet
  - Closed couplet
- Tercet
- Quatrain
  - English quatrain
  - Ballad quatrain
  - Quatrain in couplets
  - Hymn common meter
  - Tennysonian quatrain
- Quintain

….

Detecting genre

Notoriously tricky, but the combination of form, sonic devices, and metadata will certainly be useful when suggesting genre and potentially catching erroneous genre assignments.

4. (My favourite): Bad poetry

Lots of the poetry in the collection is quite bad.

Its badness is often obvious to the reader.

Some of it is “so bad it’s good” (Alison Chapman).

But what makes it bad?

Autumn Time

I sing the mellowed autumn time ;
The russet pears, the scarlet haws, the yellow sheaves of autumn time.

The fading, falling autumn time ;
The rustling leaves, the saddened winds, the pallid mists of autumn time.

The scented, fragrant autumn time ;
The clover balls, the moorland heath, the fresh-ploughed earth of autumn time.

The sober, tranquil autumn time ;
The chastened noons, the steadfast stars, the purple glooms of autumn time.

The sweet, soft sounds of autumn time ;
The twittering birds, the bleating flocks, the plaining streams of autumn time.

The resting, patient autumn time ;
The close-reaped fields, the dew-drenched grass, the low-streaked skies of autumn time.

The grand, prophetic autumn time ;
For ripened hearts and sweetened souls called home to God at autumn time.

Autumn Time

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The grand, prophetic autumn time ;
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Features of bad poetry may include:

- rigidly formulaic structure
- little to no variation in rhyme pattern and type
- excessive use of anaphora, epistrophe and other echoic features
- limited vocabulary with lots of repetition

These are features we can discover programmatically.

Promises, promises…

In our grant application, we said we would

"... demonstrate how quantitative analysis of literary texts challenges traditional literary history by giving evidence of literary change over time (e.g. rhyme innovations, types of authorship, genre trends, changes to publication practices) that will be investigated with digital tools and presented as graphs, network maps, and other visualizations."

In the meantime…

The most important thing is to surface this encoding for end-users and readers.

Make it visible.

Make it obvious.

Make it usable.

▾ Rhyme controls

- [x] All rhymes
- [x] Rhyme a
- [x] Rhyme b
- [x] Rhyme c
- [x] Rhyme d
- [x] Rhyme e
- [x] Rhyme f
- [x] Rhyme g
- [x] Rhyme h
- [x] Rhyme i
- [x] Rhyme j
- [x] Rhyme k
- [x] Rhyme l
- [x] Rhyme m
- [x] Rhyme n
- [x] Rhyme o

▾ Sonic device controls

- [x] All sonic devices
- [x] Anaphora
- [x] Epistrophe
- [x] Refrain
- [x] Variant

▸ Illustration type

▸ Statistics

Cezembres

Just a measured mile away, 1
In the lovely Breton Bay, 2
In the flush of sunset lay 3
    The Island of Cezembres. 4
And in the whispering gloaming time 5
Woke memories of the master's rhyme, 6
And made Shalott's sweet echoes chime, 7
    About unknown Cezembres. 8

Here there gleams no running river, 9
Where "light breezes dusk and shiver," 10
But the great seas sway for ever, 11
    All around Cezembres ; 12
No "tall towers" to guard the land, 13
But flowery turf and golden sand, 14
And grey rocks, that, grim and grand, 15
    Guard all remote Cezembres. 16

Did Sir Tristram hither come, 17
From timid bride and alien home, 18
Weary of his yearning dumb, 19
    To dream in still Cezembres ? 20
And in his harp's wild melodies, 21
Fling "Iseulte, Iseulte" to the seas, 22
Sigh "Iseulte, Iseulte" to the breeze 23

a b c d e f g h i j k l m n o p q r

s t u v w x y z æ ɑ ’

- a
- a bay
- a bliss
- a chain
- a dream
- a grig
- a hand
- a jot
- a kiss
- a medlar
- a pain
- a part
- a pedlar
- a plot
- a queen
- a ship
- a smile
- a snow

▾ Poem features

*Dominant rhyme scheme

The rhyme-scheme of at least 50% of a poem's stanzas, in "abab" form. "IRREGULAR" is also a value.

aabb

abab ✘ aabb ✘

Search

Clear

Original language

- Polish
- Portuguese
- Romaic (modern vernacular Greek)
- Romanian
- Russian
- Scottish Gaelic
- Serbian

Sonic features (transcribed poems only)

*Contains anaphora: ✔ *Contains epistrophe: ✔ *Contains internal rhyme: ? *Contains a refrain: ?

Other features

Allonymous: ? Has illustration(s)/decoration(s): ? Is translation: ? Pseudonymous: ?

Quoted in prose contribution: ? In Christmas issue: ? Unsigned: ?

Statistics (transcribed poems only)

*Anaphora

From: 0 To: 121

Data for download

On our **Text analysis** page, we provide statistical data in spreadsheet form, along with metadata and plain-text versions of the poetry, so it's easy for end-users to run their own analyses.

The XML is also in a public repo (hcmc.uvic.ca/svn/dvpp) for anyone who would like to use XPath/XQuery/XSLT for analysis purposes.

Conclusions

In our collection, sonic device encoding does not in itself generate research questions, or reveal genuine trends or patterns.

However, it does provide very useful input factors for analysis in the service of very specific and clearly-defined research questions.

So surfacing the encoding in multiple ways so that any researcher can make use of it is crucial.

And the act of doing the encoding itself helps us define and refine our terms and our understanding of how sound works in this poetry collection.

References

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