

Binghamton University

The Open Repository @ Binghamton (The ORB)

Library Created Resources

University Libraries

12-2022

Voyant Tools Workshop - Fall 2022

Amy E. Gay

Follow this and additional works at: https://orb.binghamton.edu/library_resources

Voyant Tools



Digital Scholarship Team
Binghamton University Libraries
dscenter@binghamton.edu

To access these slides: https://bit.ly/dig_schol_voyant22

What we will do today

- overview of text mining / analysis
- overview and hands-on practice with Voyant
- example uses for research and teaching by David Campbell (Professor - CCPA Public Administration)
- resources for continued learning

Text Mining & Analysis

What these terms mean

Text mining / text analysis refers to extracting information from text-based files

- Commonly unstructured text (including documents; logs; media files; qualitative research)
- Method for structuring the textual data (for example by topics)
- Help find trends and patterns across texts
- Help make the data more structured and provide quantitative insights (like through creating visualizations of the data)
- Can include digitized texts and native digital texts

What can you do with text mining / analysis?

- Summarize topics of interest in a group of texts
- Connect common keywords among a group of texts
- Track sentiment over topic, text source, time period
- Identify names, locations, entities
- Distinguish texts in a corpus by a given author
- Differentiate poetry from prose
- Contrast the vocabulary of different corpora
- Categorize documents

Project examples

Text mining in cultural studies: **The Achilles Effect: what pop culture is teaching young boys about masculinity** - Crystal Smith

- Example of how something as simple as a word cloud can make a powerful statement

Text mining literary networks viral texts projects by Ryan Cordell and David Smith ([mapping networks of reprinting in 19th century newspapers and magazines](#))

- seeks to develop theoretical models that will help scholars better understand what qualities helped particular news stories, short fiction, and poetry “go viral” in nineteenth-century newspapers and magazines

Text mining novels American fiction - across 27,000 novel - David McClure Stanford Literary Lab

Common issues with digitized texts

Newspaper column breaks

Page structure

Condition of the original physical document

Type of text contained within the document

Year of the original document was created

Maturity of the OCR algorithm used at the time of creation

- OCR = optical character recognition

Images

Data cleaning for text files

- Removing spaces, tabs, and new lines you are impacting terms that could be one or two words
- Removing punctuation messes with natural language processing e.g. sentence structure, proper nouns, making everything lowercase
- Stop words and keep words - determine what words to keep or remove within your text pulling out the common words like and, if, the (unless they have importance to the text)
- Can remove medieval special characters from text using the special characters tool
- Sometimes you need to go back to the original documents and strip out what cannot be cleaned from the tool and reupload the files

Data Cleaning tools (free to use)

OpenRefine (<https://openrefine.org/>)

Lexos (<http://lexos.wheatoncollege.edu/upload>)

*while data cleaning is commonly considered the first step, using text analysis tools like Voyant can help you see where / when data cleaning is needed

Text Analysis using Voyant Tools



What is Voyant





What is Voyant

- ◉ **Voyant** is an application for text / data mining, visualization, and analysis
- ◉ Developed by Stéfan Sinclair (McGill University) and Geoffrey Rockwell (University of Alberta)
 - ◉ You can view the code for **Voyant on GitHub**



What is Voyant

- ◉ Open source (*free to use*)
- ◉ Web-based environment (*interface*)
 - This means that you do not need to install Voyant Tools to use it; it may be done through your browser



Why Voyant Tools

- ◉ Great option for anyone new to text mining, developing a text corpus, and analyzing texts or qualitative data
- ◉ Created with a goal to support scholarly reading and interpretation of texts
- ◉ Includes many interactive features (and **guidance** for using each feature)



Why Voyant Tools

- ◉ Option to analyze resources found online or your own computer files
- ◉ Ability to download the visualizations / analyses created or embed them on web pages



Why Voyant Tools

- ◉ Supports large size texts and a variety of file formats, including:
 - ◉ Text files (**txt**), web based files (**html**), **XML** files, **PDF** files, rich text files (**rtf**), and Microsoft Word documents (**docx**)
 - ◉ Can also use zip files (**zip**) for multiple texts collected



Getting Started





Go to Voyant in your browser

Go to <https://voyant-tools.org/>

This page should appear:



Add Texts 🔍 🔊 ?

Type in one or more URLs on separate lines or paste in a full text.

Voyant Tools is a web-based reading and analysis environment for digital texts.

How to Upload your Text Corpus



Four Options for adding files

Option 1: Open one of the practice corpora provided by Voyant

Add Texts

Type in one or more URLs on separate lines or paste in a full text.

Open Upload

Reveal

Voyant Tools is a web-based reading and analysis environment for digital texts.

Four Options for adding files

Option 2: Copy / paste the full text into the box provided



Add Texts

Type in one or more URLs on separate lines or paste in a full text.

Open Upload

Reveal

Four Options for adding files

Option 3: Copy / paste the link(s) (URLs) into the box provided

put each link on separate line

Add Texts

Type in one or more URLs on separate lines or paste in a full text.

Open Upload Reveal

Four Options for adding files

Option 4: Add files from your computer using the upload button below the text box



The screenshot shows a web interface titled "Add Texts". At the top right, there are icons for a globe, a moon, and a question mark. Below the title is a large text input area with the placeholder text "Type in one or more URLs on separate lines or paste in a full text.". At the bottom left, there are three buttons: "Open" (with a folder icon), "Upload" (highlighted with a blue border), and "Reveal" (a blue button with a checkmark icon). A black line connects the "Upload" button to the text input area.

Option 1: Using a Corpora from Voyant (Demo)



Reminder of how to do Option 1

Option 1: Open one of the practice corpora provided by Voyant

Add Texts

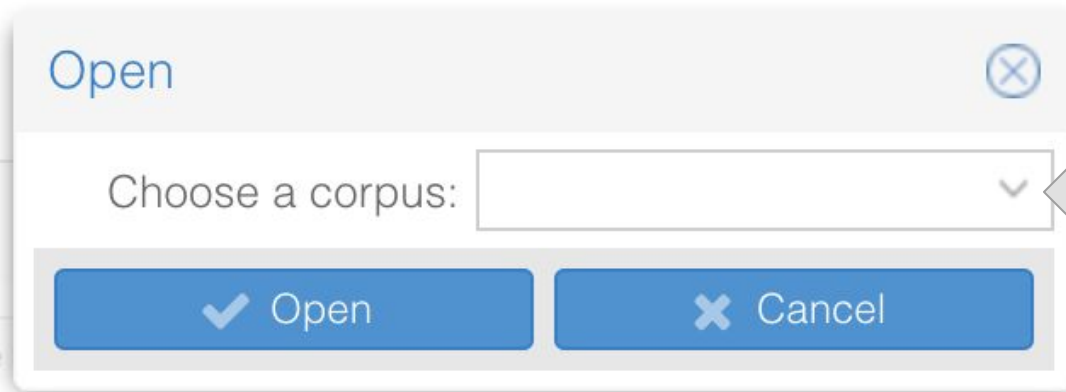
Type in one or more URLs on separate lines or paste in a full text.

Open Upload

Reveal

Voyant Tools is a web-based reading and analysis environment for digital texts.

This box will appear

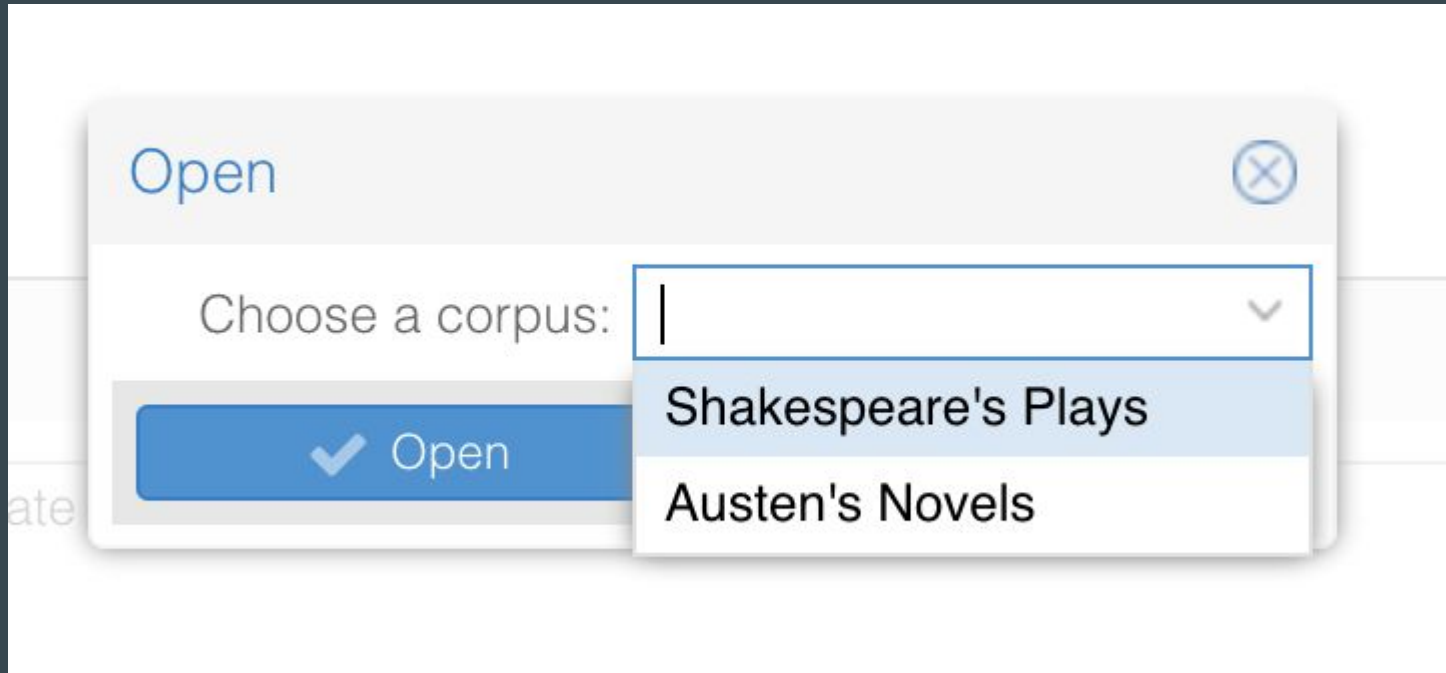


Click the dropdown arrow and two options will appear:

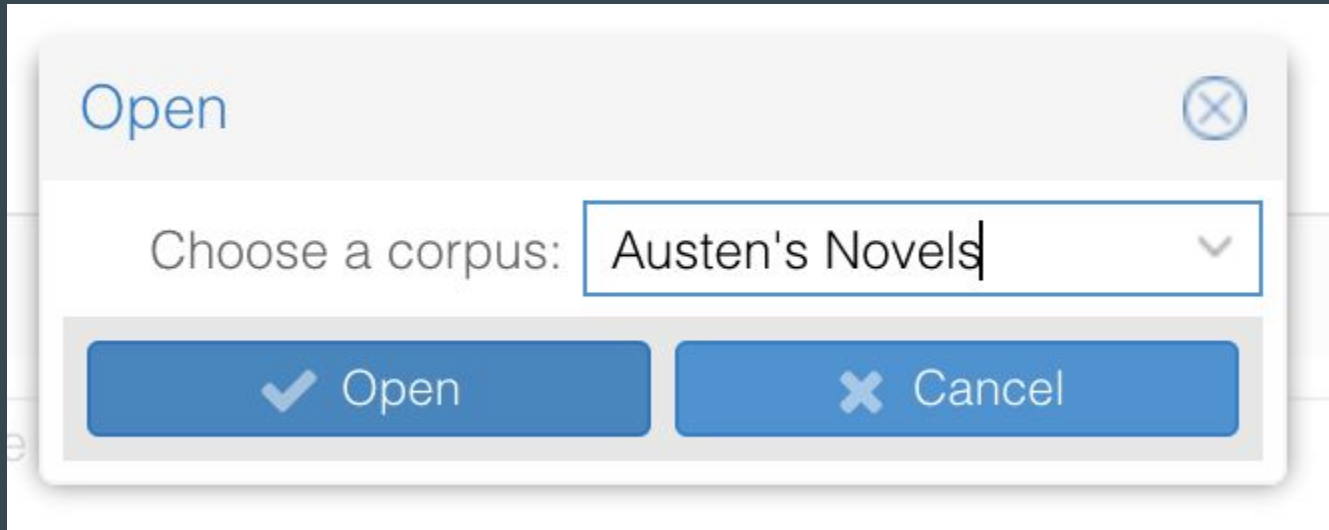
One is a corpus of William Shakespeare plays

One is a corpus of Jane Austen novels

Select one of the following



Click Open



Corpus should open without pressing Reveal

Voyant Tools

Navigation: [Cirrus](#) [Terms](#) [Links](#) [Reader](#) [TermsBerry](#) [Trends](#) [Document Terms](#)

1790 Love And Freindship
 LOVE AND FREINDSHIP AND OTHER EARLY WORKS
 (Love And Friendship And Other Early Works)
 A Collection of Juvenile Writings
 By Jane Austen
 Transcriber's Note: A few very small changes have been made to this version: Italics have been converted to capitals. The British 'pound' symbol has been converted to 'L'; but in general the author's erratic spelling, punctuation and capitalisations have been retained.
 CONTENTS.
 Love and Freindship
 Lesley Castle
 The History of England
 Collection of Letters
 Scraps
 LOVE AND FREINDSHIP

Relative Frequencies

Legend: mr (blue), mrs (green), said (pink), miss (purple), think (cyan)

Corpus (Documents): 1790 Love..., 1805 Lady..., 1811 Sense..., 1813 Pride..., 1814 Mansf..., 1815 Emma..., 1818 North..., 1818 Persa...

Summary | Documents | Phrases | **Contexts** | Bubblelines | Correlations

This corpus has 8 documents with 781,763 total words and 15,368 unique word forms. Created about a year ago.

Document Length:

- Longest: 1815 Emma (160996); 1814 Mansfield Park (160461); 1813 Pride and Prejudice (122204); 1811 Sense and Sensibility... (119957); 1818 Persuasion (83657)
- Shortest: 1805 Lady Susan (23149); 1790 Love And Freindship (33559); 1818 Northanger Abbey (77789); 1818 Persuasion (83657); 1811 Sense and Sensibility... (119957)

Vocabulary Density:

- Highest: 1805 Lady Susan (0.127); 1790 Love And Freindship (0.126); 1818 Northanger Abbey (0.079); 1818 Persuasion (0.070); 1811 Sense and Sensibility... (0.054)
- Lowest: 1815 Emma (0.046); 1814 Mansfield Park (0.050); 1813 Pride and Prejudice (0.054); 1811 Sense and Sensibility... (119957)

Contexts Table:

Document	Left	Term	Right
1) 1790 ...	genteel family since we came.	mr	and Mrs Marlowe are very
1) 1790 ...	A brother of Mrs Marlowe,	mr	Cleveland is with them at
1) 1790 ...	thirdd by the entreaties of	mr	. Fitzgerald who is certainly one
1) 1790 ...	a Concert or a Ball.	mr	Marlowe is so desirous of
1) 1790 ...	Kickabout's; we were escorted by	mr	Fitzgerald who is a very
1) 1790 ...	of my Charlotte at Bristol.	mr	and Mrs M. were the
1) 1790 ...	handsome?) The elegant address of	mr	Cleveland, his polished Manners and
1) 1790 ...	conspicuous in the conversation of	mr	Cleveland. The approach of Sir

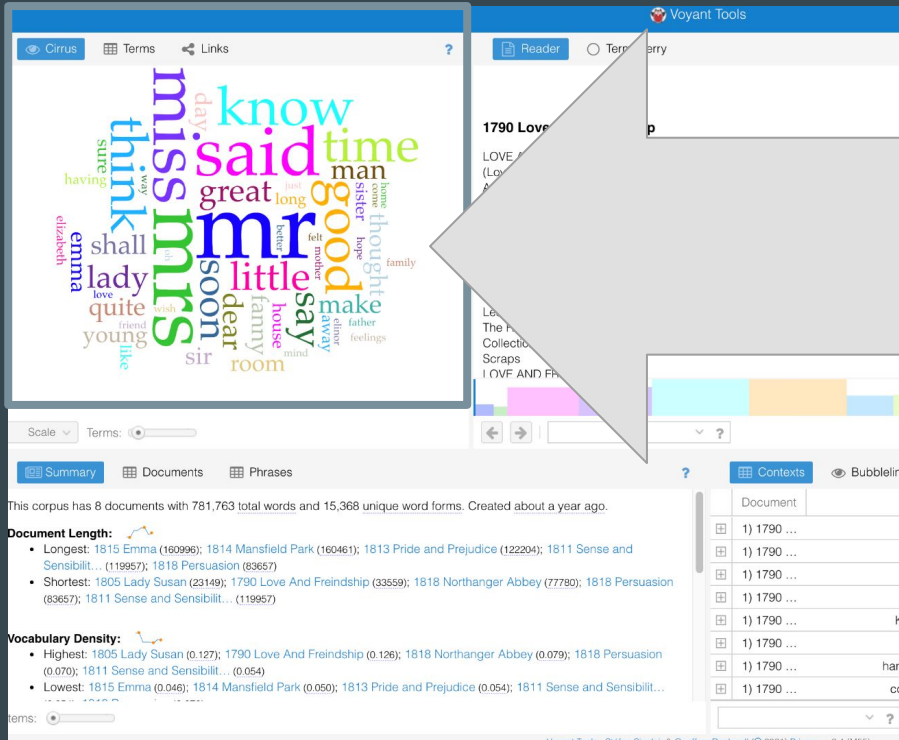
Terms: 3,117 context expand Scale



Default Skin

- The tool panel that opens contains five tools and is called the **default skin**
 - Cirrus
 - Reader
 - Trends
 - Summary
 - Contexts

Cirrus



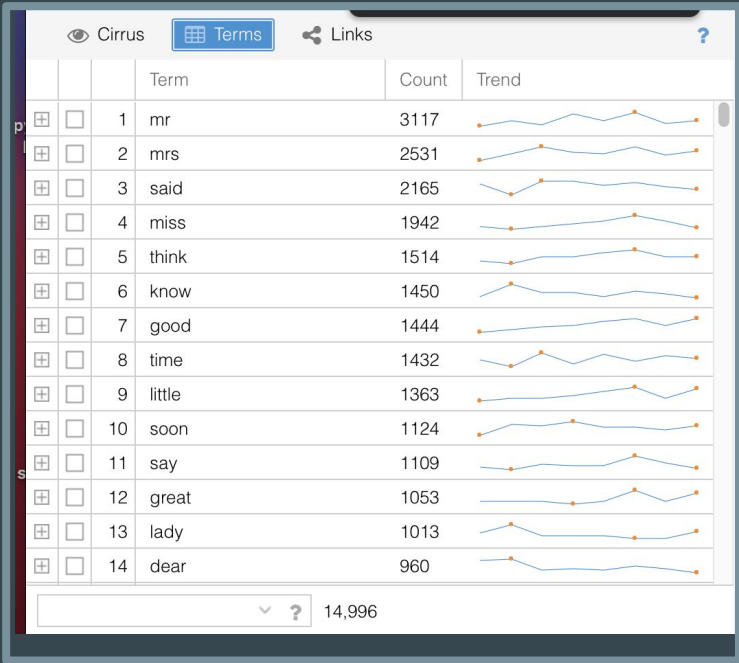
Cirrus is a word cloud that visualizes the words used most frequently

You can use it for a corpus or individual file















Central location + larger size = most frequently used words

The color of words and their position are not significant - if you resize the window or reload the page, words may appear in a different location than before

Cirrus



The screenshot shows the Cirrus interface with the 'Terms' tab selected. The table displays 14 common terms with their counts and trend lines. A search box at the bottom shows a total count of 14,996.

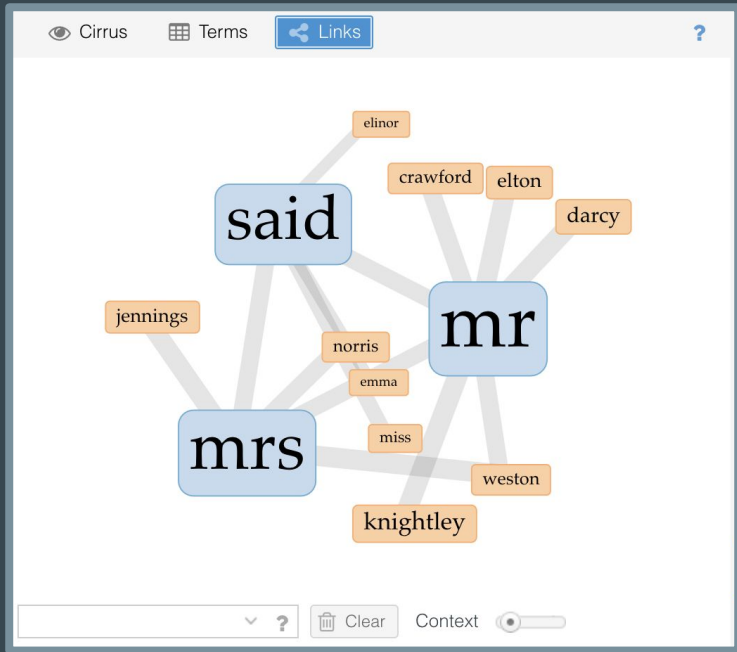
		Term	Count	Trend
+	□	1 mr	3117	
+	□	2 mrs	2531	
+	□	3 said	2165	
+	□	4 miss	1942	
+	□	5 think	1514	
+	□	6 know	1450	
+	□	7 good	1444	
+	□	8 time	1432	
+	□	9 little	1363	
+	□	10 soon	1124	
+	□	11 say	1109	
+	□	12 great	1053	
+	□	13 lady	1013	
+	□	14 dear	960	

Search: ? 14,996

If you click the **Terms** icon, a table view of common terms across your corpus will appear

A search box will appear at the bottom to search for specific terms as well

Cirrus



The **Links** icon shows a network graph of frequently used words

Hovering your mouse over words will show their frequency of use in the corpus

If you **double-click** on a word it will show more results

Keywords are in blue, words in proximity to them are in orange

Cirrus

Options

Stopwords: Auto-detect apply globally

White List:

Categories: auto

Font family: Palatino

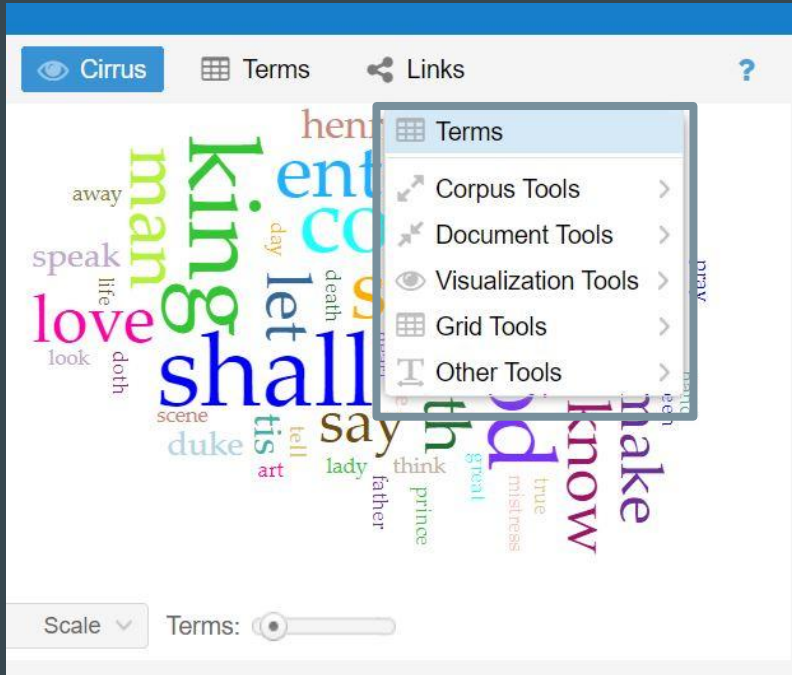
Palette: default

Contexts Bubbleslines

If you **click the two circles**, this option box will appear to adjust settings

- **Stopwords** lets you add to Voyant Tools auto-common stopwords list that were already removed, such as "an," "and," "or," "but," etc.
- **List** lets you define allowed words (counteracts stopwords if listed)
- **Categories** lets you categorize frequent words
- **Font family** lets you change the font
- **Palette** lets you change color coding

Cirrus



If you **click the windows icon**, this categorized option box will appear to select a different Voyant tool based on what you want to view

Try changing the tool to a different one - what happens?

Reader

The screenshot shows the Voyant Tools interface with the 'Reader' tab selected. On the left, there is a word cloud with prominent words like 'miss', 'mrs', 'know', 'said', 'time', 'man', 'good', 'make', 'say', 'little', 'soon', 'dear', 'house', 'mind', 'room', 'sir', 'young', 'like', 'friend', 'quite', 'love', 'emma', 'shall', 'sure', 'way', 'think', 'having', 'miss', 'day', 'know', 'said', 'time', 'man', 'good', 'make', 'say', 'little', 'soon', 'dear', 'house', 'mind', 'room', 'sir', 'young', 'like', 'friend', 'quite', 'love', 'emma', 'shall', 'sure', 'way', 'think', 'having'. Below the word cloud are controls for 'Scale' and 'Terms'. The main window displays the text of '1790 Love And Freindship' by Jane Austen, including a transcriber's note and a table of contents. On the right, there is a 'Trends' chart showing the frequency of terms like 'mr' and 'mrs' over time. At the bottom, there is a 'Contexts' table showing the frequency of terms in different documents.

1790 Love And Freindship

LOVE AND FREINDSHIP AND OTHER EARLY WORKS
(Love And Freindship And Other Early Works)
A Collection of Juvenile Writings
By Jane Austen

Transcriber's Note: A few very small changes have been made to this version: Italics have been converted to capitals. The British 'pound' symbol has been converted to 'L'; but in general the author's erratic spelling, punctuation and capitalisations have been retained.

CONTENTS.
Love and Freindship
Lesley Castle
The History of England
Collection of Letters
Scraps
LOVE AND FREINDSHIP

Document	Left	Term	Right
1) 1790 ...	genteel family since we came,	mr	and Mr
1) 1790 ...	A brother of Mrs Marlowe,	mr	Cleaveland
1) 1790 ...	thirded by the entreaties of	mr	. Fitzger
1) 1790 ...	a Concert or a Ball.	mr	Marlow
1) 1790 ...	Kickabout's; we were escorted by	mr	Fitzger
1) 1790 ...	of my Charlotte at Bristol.	mr	and Mr
1) 1790 ...	handsome?) The elegant address of	mr	Cleaveland
1) 1790 ...	conspicuous in the conversation of	mr	Cleaveland

Reader is where the text is displayed for reading

You can scroll down within the text reader to view more content

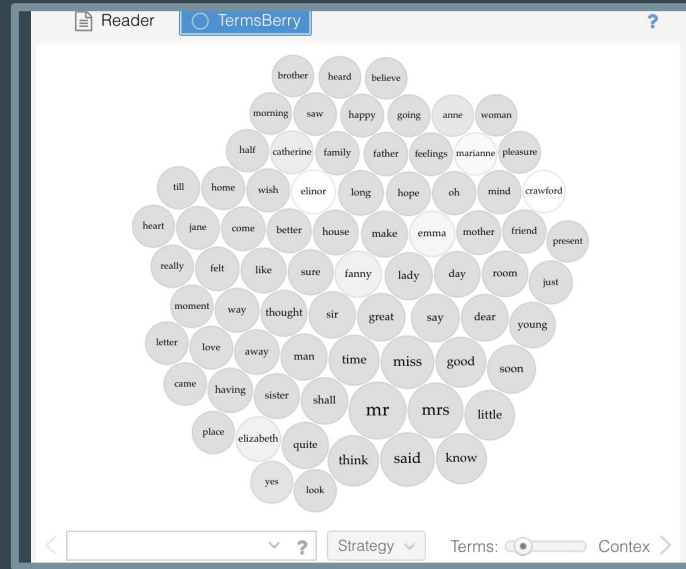
Hover over a word to show its frequency in the document

You can click on a word or search for it in the search box to see how often it appears in your corpus

Reader

If you change it to **TermsBerry**, this visual will display with frequent words

Hover your mouse over a bubble to see how many times that word appears and words that appear next to it in texts will also change color



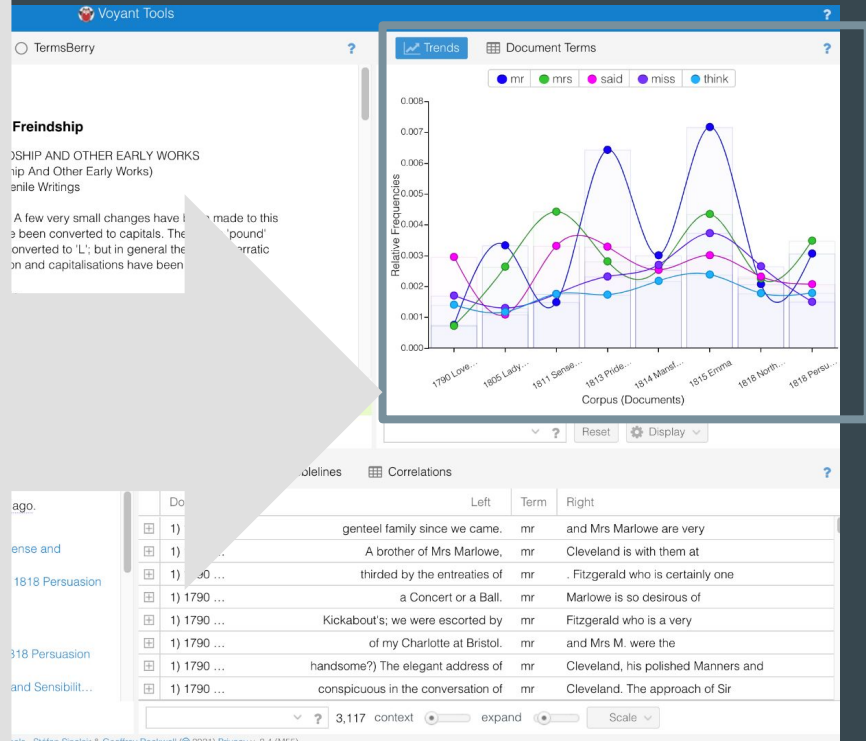
Trends

Trends (or **Term Frequency Chart**) provides distribution plots that display the frequencies of word(s) across texts

Each series in the graph is colored according to the word it represents and a color key is displayed

You can click on the words in the key to make them disappear or reappear in chart

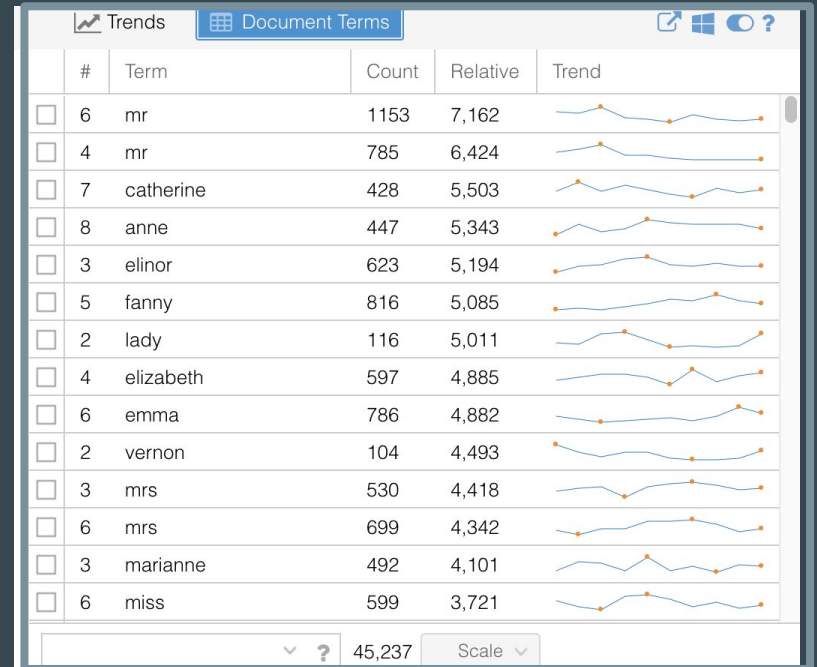
An information box will appear by putting your mouse over the dot



Trends

If you click **Document Terms**, this new frequency graph / data will display instead

What do you notice?



Summary









Summary Documents Phrases ?

	Title	Words	Types	Ratio	Words/Sentence
1	1790 Love And Freindship	33,5...	4,235	13%	25.8
2	1805 Lady Susan	23,1...	2,929	13%	25.2
3	1811 Sense and Sensibility	119,...	6,419	5%	23.9
4	1813 Pride and Prejudice	122,...	6,538	5%	20.7
5	1814 Mansfield Park	160,...	8,077	5%	23.6
6	1815 Emma	160,...	7,356	5%	19.2
7	1818 Northanger Abbey	77,7...	6,132	8%	22.2
8	1818 Persuasion	83,6...	5,858	7%	23.3

Clicking the **Documents** Icon displays this data by file in the corpus

Summary

Summary Documents **Phrases** ?

	Term	Count	Length	Trend
<input type="checkbox"/>	what reverse we have man's boasted power and freedom all are flown lord of th...	2	28	
<input type="checkbox"/>	my first displays the wealth and pomp of kings lords of the earth their luxury an...	2	17	
<input type="checkbox"/>	you and miss smith and miss fairfax will be three and the two miss coxes five	2	16	
<input type="checkbox"/>	another view of man my second brings behold him there the monarch of the seas	2	15	
<input type="checkbox"/>	the loss of mary i must consider as comprehending the loss of crawford and	2	14	
<input type="checkbox"/>	for he would carve the partridge if it should be a tough one	2	13	
<input type="checkbox"/>	the borders of an extensive forest and about three miles from the sea	2	13	
<input type="checkbox"/>	i did not come to bath to drive my sisters about	2	11	

The **Phrases** icon displays phrases that are repeated, how often, and their word length

Contexts

1790 Love And Freindship

LOVE AND FREINDSHIP AND OTHER (Love And Friendship And Other Early A Collection of Juvenile Writings By Jane Austen

Transcriber's Note: A few very small c version: Italics have been converted to symbol has been converted to 'L'; but spelling, punctuation and capitalisatic CONTENTS.

Love and Freindship
Lesley Castle
The History of England
Collection of Letters
Scraps
LOVE AND FREINDSHIP

This corpus has 8 documents with 781,763 total words and 15,368 unique word forms. Created about a year ago.

Document Length:

- Longest: 1815 Emma (160996); 1814 Mansfield Park (160461); 1813 Pride and Prejudice (122204); 1811 Sense and Sensibility... (119957); 1818 Persuasion (83657)
- Shortest: 1805 Lady Susan (23149); 1790 Love And Freindship (33559); 1818 Northanger Abbey (77780); 1818 Persuasion (63657); 1811 Sense and Sensibility... (119957)

Vocabulary Density:

- Highest: 1805 Lady Susan (0.127); 1790 Love And Freindship (0.126); 1818 Northanger Abbey (0.079); 1818 Persuasion (0.070); 1811 Sense and Sensibility... (0.054)
- Lowest: 1815 Emma (0.046); 1814 Mansfield Park (0.050); 1813 Pride and Prejudice (0.054); 1811 Sense and Sensibility... (0.054)

Contexts shows the occurrence of keywords, the text that surrounds them, and the file in which the text appears

Document	Left	Term	Right
1) 1790 ...	genteel family since we came,	mr	and Mrs Marlowe are very
1) 1790 ...	A brother of Mrs Marlowe,	mr	Cleveland is with them at
1) 1790 ...	thirded by the entreaties of	mr	. Fitzgerald who is certainly one
1) 1790 ...	a Concert or a Ball.	mr	Marlowe is so desirous of
1) 1790 ...	Kickabout's; we were escorted by	mr	Fitzgerald who is a very
1) 1790 ...	of my Charlotte at Bristol.	mr	and Mrs M. were the
1) 1790 ...	handsome?) The elegant address of	mr	Cleveland, his polished Manners and
1) 1790 ...	conspicuous in the conversation of	mr	Cleveland. The approach of Sir

3,117 context expand Scale

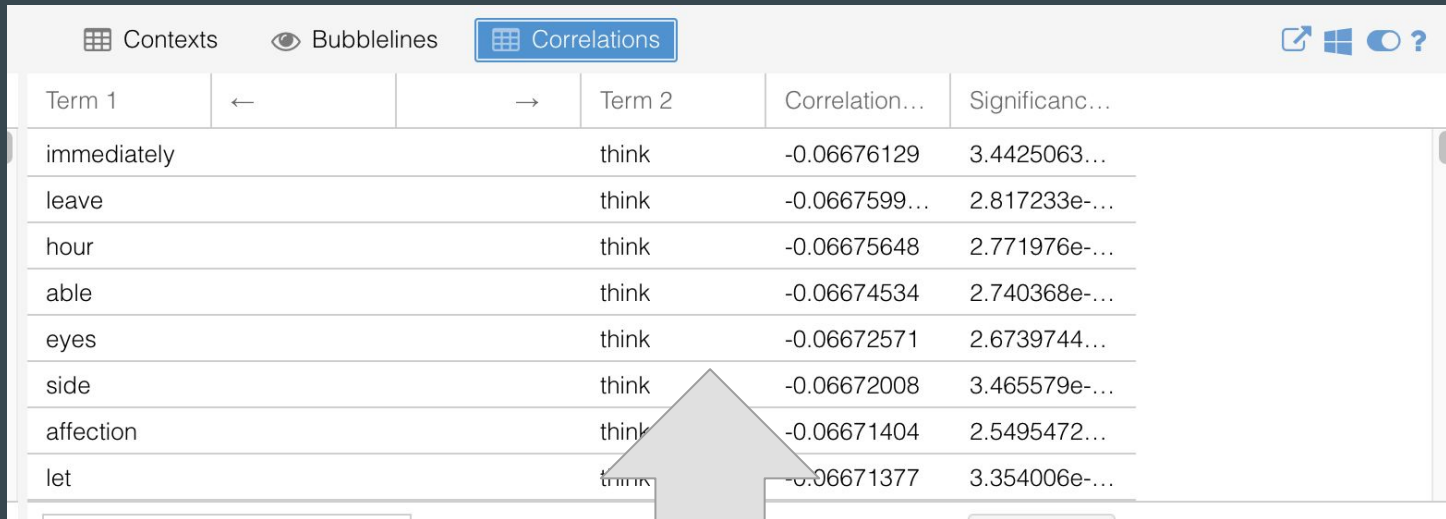
Contexts



If you click **Bubblelines**, this new version of the visual appears.

Try clicking one of the circles - what happens?

Contexts



Term 1	←	→	Term 2	Correlation...	Significanc...
immediately			think	-0.06676129	3.4425063...
leave			think	-0.0667599...	2.817233e...
hour			think	-0.06675648	2.771976e...
able			think	-0.06674534	2.740368e...
eyes			think	-0.06672571	2.6739744...
side			think	-0.06672008	3.465579e...
affection			think	-0.06671404	2.5495472...
let			think	-0.06671377	3.354006e...

The **Correlations** option compares two words

- If there is a negative correlation, it means that as the use of term 1 is used more frequently, term 2 is used less frequently
- If there is a positive correlation, then when term 1 is used term 2 tends to also be used at an increase

Option 2: Copy / Paste text





Text for Option 2

For this practice, copy / paste the text from one of our linked data files in the **inaugural speeches** folder

Reminder of how to do Option 2

Option 2: Copy / paste the full text into the box
provided



Add Texts

Type in one or more URLs on separate lines or paste in a full text.

Open Upload Reveal

Voyant Tools is a web-based reading and analysis environment for digital texts.

Option 2

Option 2: Copy / paste the full text into the box provided



Option 3: Copy / Paste links





Texts for option 3

For this option we will analyze chapters from *Data Feminism* by Catherine D'Ignazio and Lauren F. Klein

- Go to <https://data-feminism.mitpress.mit.edu/>
- Click on a chapter you would like to analyze and copy / paste the link in the Voyant text box
- If you would like to analyze more than one chapter at once, repeat this process before pressing Reveal

Reminder of how to do Option 3

Option 3: Copy / paste the link(s) (URLs) into the
box provided

put each link on separate line

Add Texts

Type in one or more URLs on separate lines or paste in a full text.

Open Upload Reveal

Example Chapters

Intro, 1, 2, 4, 7

Option 3: Copy / paste the link(s) (URLs) into the box provided

put each link on separate line



Add Texts

<https://data-feminism.mitpress.mit.edu/pub/frfa9szd/release/4>
<https://data-feminism.mitpress.mit.edu/pub/vi8obxh7/release/3>
<https://data-feminism.mitpress.mit.edu/pub/ei7cogfn/release/2>
<https://data-feminism.mitpress.mit.edu/pub/h1w0nbqp/release/2>
<https://data-feminism.mitpress.mit.edu/pub/0vgzaln4/release/2>

Open Upload Reveal

Chapters Intro, 1, 2, 4, and 7

1. The Power Chapter - Data Feminism

Skip to main content

SearchDashboardcaret-downLogin or Signup

Data Feminism

Published on Mar 16, 2020

1. The Power Chapter Principle #1 of Data Feminism is to Examine Power. Data feminism begins by analyzing how power operates in the world.

by Catherine D'Ignazio and Lauren Klein

Published on Mar 16, 2020

Cite

Social

Download

Scale Terms

Summary Documents Phrases

This corpus has 5 documents with 44,716 total words and 6,077 unique word forms. Created now.

Document Length:

- Longest: 1. The Power Chapter... (10207); 2. Collect, Analyze... (9803)
- Shortest: 7. Show Your Work - Data... (7798); Introduction: Why Data... (7972)

Vocabulary Density:

- Highest: 7. Show Your Work - Data... (0.281); Introduction: Why Data... (0.282)
- Lowest: 2. Collect, Analyze... (0.239); 1. The Power Chapter... (0.253)

Average Words Per Sentence:

- Highest: 7. Show Your Work - Data... (34.4); 2. Collect, Analyze... (30.4)
- Lowest: Introduction: Why Data... (28.9); 1. The Power Chapter... (28.9)

Most frequent words in the corpus: **data** (556); **people** (199); **work** (192); **power** (168); **women** (163)

Items: 0

Relative Frequencies

Corpus (Documents)

1. The... 2. Collect... 4. "What... 7. Show... Intros...

Legend: data (blue), people (purple), work (green), power (cyan), women (magenta)

Contexts

Document	Left	Term	Right
1) 1. Th...	caret-downLogin or Signup	data	Feminism Published on Mar 16
1) 1. Th...	Power Chapter Principle #1 of	data	Feminism is to Examine Power
1) 1. Th...	Feminism is to Examine Power	data	feminism begins by analyzing how
1) 1. Th...	Chapter Contents- Principle: Examine Power	data	feminism begins by analyzing how
1) 1. Th...	4 On the contrary, the	data	showed that Black women with
1) 1. Th...	SisterSong, described the state of	data	collection on maternal mortality in
1) 1. Th...	and cardiac care "Our maternal	data	is embarrassing," stated Stacie Galler
1) 1. Th...	the significance of this "embarrassing"	data	more clear: "What we choose
1) 1. Th...	and states to begin collecting	data	on the issue?9 Why
1) 1. Th...	issue?9 Why are those	data	still not viewed as big

556 context expand Scale

Voyant Tools · Stefan Sinclair & Geoffrey Rockwell (© 2021) Privacy v. 2.4 (M5)

Option 4: Upload File(s)





Option 4 Upload files

If you are only using one file, you may upload that single file

If you want more than one file uploaded, you must upload the folder as a zip file

our example is a zip file with 3 .txt files

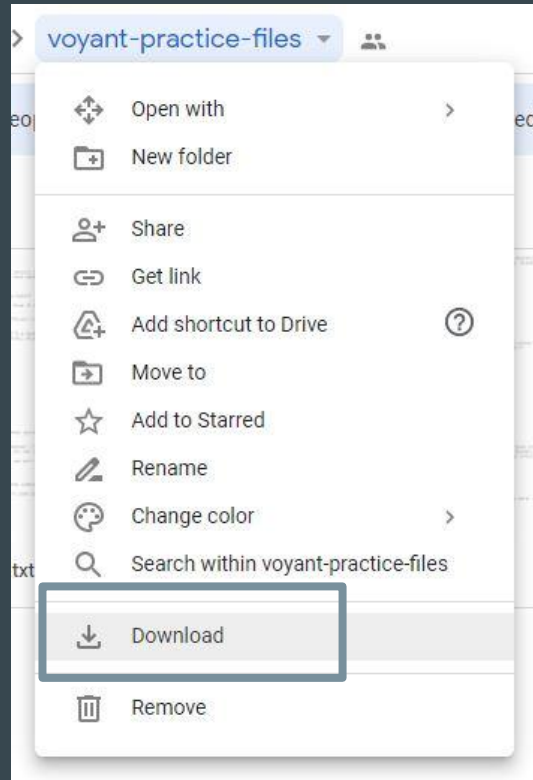


Upload Zip file

Go to the **practice data folder**

Click on the folder title you are interested in,
right-click on the folder title and select **Download**

Upload Zip file



Reminder of how to do Option 4

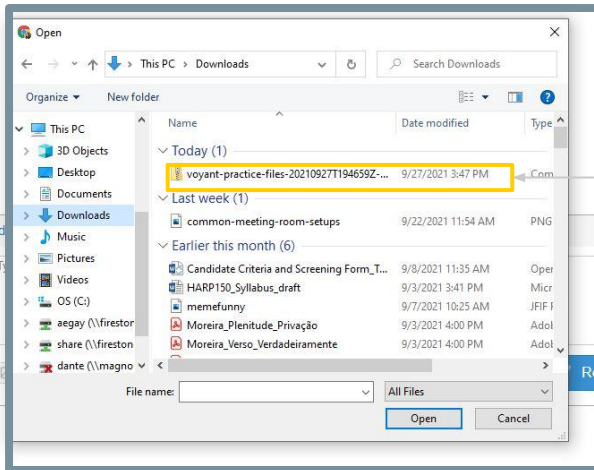
Option 4: Add files from your computer using the upload button below the text box



The screenshot shows a web interface titled "Add Texts". At the top right, there are icons for a globe, a moon, and a question mark. Below the title is a large text input area with the placeholder text "Type in one or more URLs on separate lines or paste in a full text.". At the bottom left, there are three buttons: "Open" (with a folder icon), "Upload" (with a document icon), and "Reveal" (with a checkmark icon). The "Upload" button is highlighted with a red box, and a red line connects it to the text input area, indicating the process of uploading files.

Voyant Tools is a web-based reading and analysis environment for digital texts.

Option 4 Upload File



Double-click the file or select file and click Open



Voyant Tools - try on your own

- Voyant currently has 24 options for tools
 - Try changing 3 of the default skin tools to a different one (remember which symbol lets you do this?)

What do the different tools reveal?

How do your results change?

Which tools do you like best or find confusing to understand?



Things to keep in mind

You can**NOT** “save” in Voyant

Three alternative options:

- ◉ **Option 1:** Download the visualizations that work best for your analysis
- ◉ **Option 2:** Save your corpus used in a file to come back to
- ◉ **Option 3:** Bookmark the Voyant link somewhere and it should remain available as long as it is accessed at least once every month

Exporting your Corpus



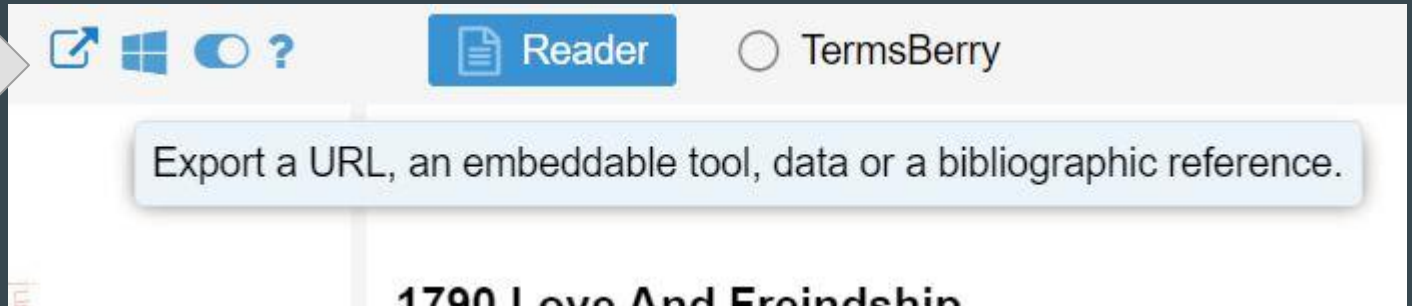


Ways to export your corpus

- ◉ Bookmark a corpus to return to it later:
 - ◉ Click **Export** at the top of the page → select **URL for this view**
 - ◉ Voyant indicates that the corpus will be “**accessible as long as it accessed at least once a month**”
- ◉ Embed a corpus to your webpage:
 - ◉ Click **Export** at the top of the page → select an HTML snippet → click export for the snippet to appear
 - ◉ Copy and paste the snippet in your page

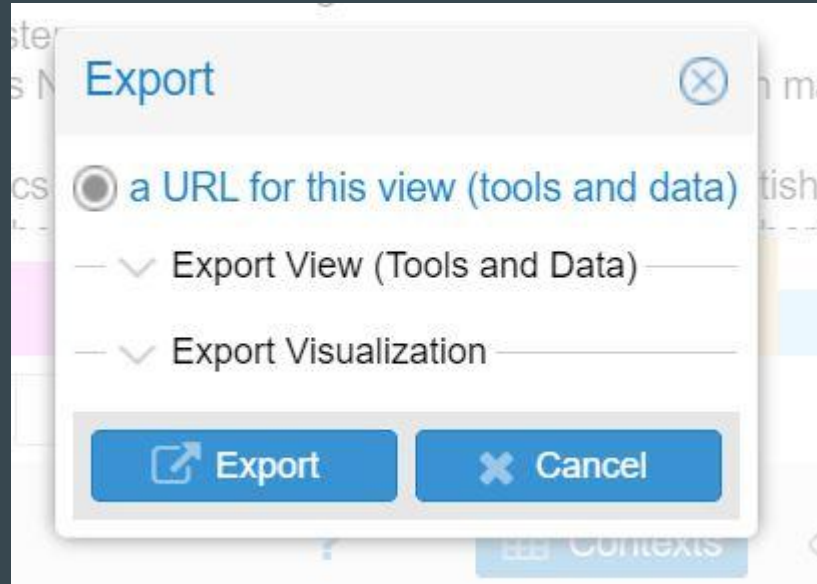
Download visualization

Click the square with arrow



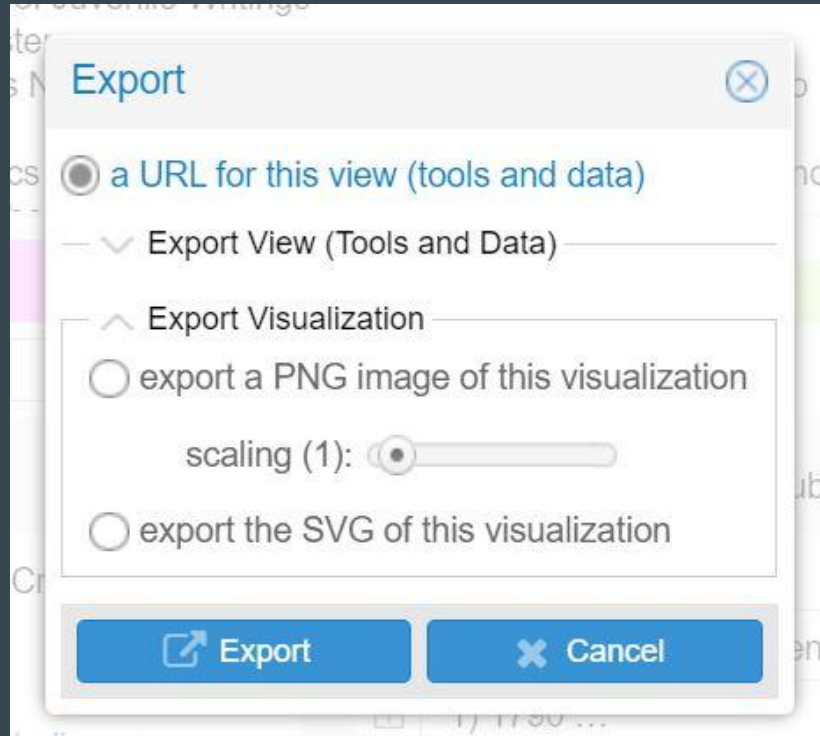
Download visualization

This box will appear



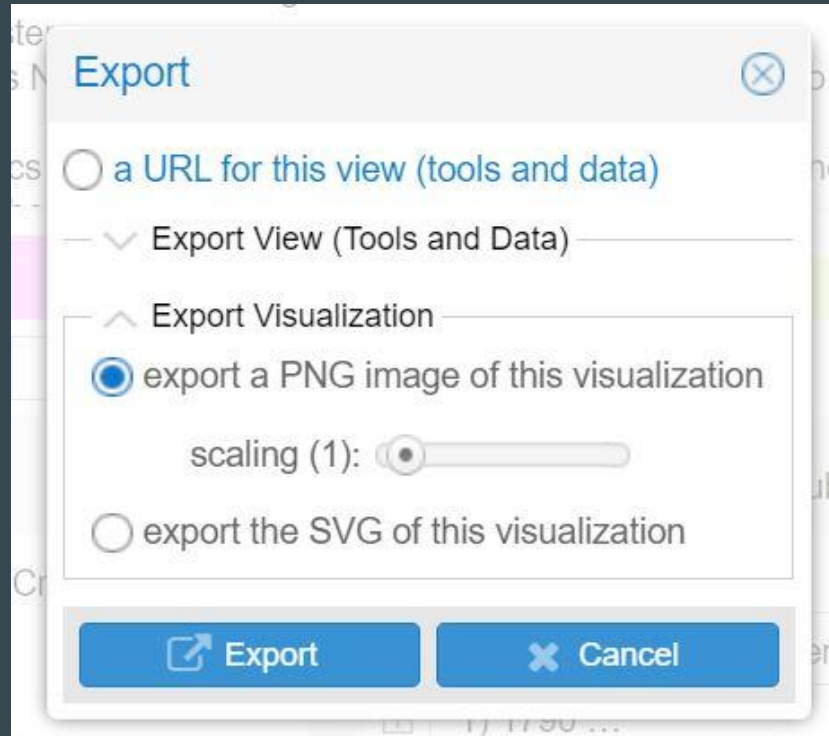
Download visualization

Select Export
Visualization



Download visualization

Select PNG and
option to change size
with Scaling bar



Download visualization

Right-click thumbnail
image to the right

Export PNG



This is a thumbnail of the PNG image, right-click or ctrl-click on the image to save a full-size copy on your hard drive.



Alternatively, copy the HTML code below.

```
XCGgENAlagTQR0ASVJnB6mEZAI6AR0AhkFgFNUJnFV8+uEdAlaAQ0AmkioAkqTeD  
0MI2ARkAjoBHILAKaoDKLr55dI6AR0AhoBNJEQBNUmsDpYRoBjYBGQCOQQWQQ0Q  
WUWXz27RkAjoBHQCKSJgCaoNIHTwzQCGgGNgEYgswhogsosvnp2jYBGQCOgEUg  
TAU1QaQKnh2kENAlaAY1AZhHQBjVZfPXsGgGNgEZAI5AmAv8fQDd5koesm94AAA  
AASUVORK5CYII=" />
```

OK

Download visualization

Export PNG

i This is a thumbnail of the PNG image, right-click or ctrl-click on the image to save a full-size copy to your hard drive.

Alternatively
XCGgENA
0MI2ARKA
WUWXz27
TAU1QaQ
AASUVOF

Select Save Image as....

- Open image in new tab
- Save image as...
- Copy image
- Copy image address
- Create QR code for this image
- Search Google for image
- Inspect Ctrl+Shift+I

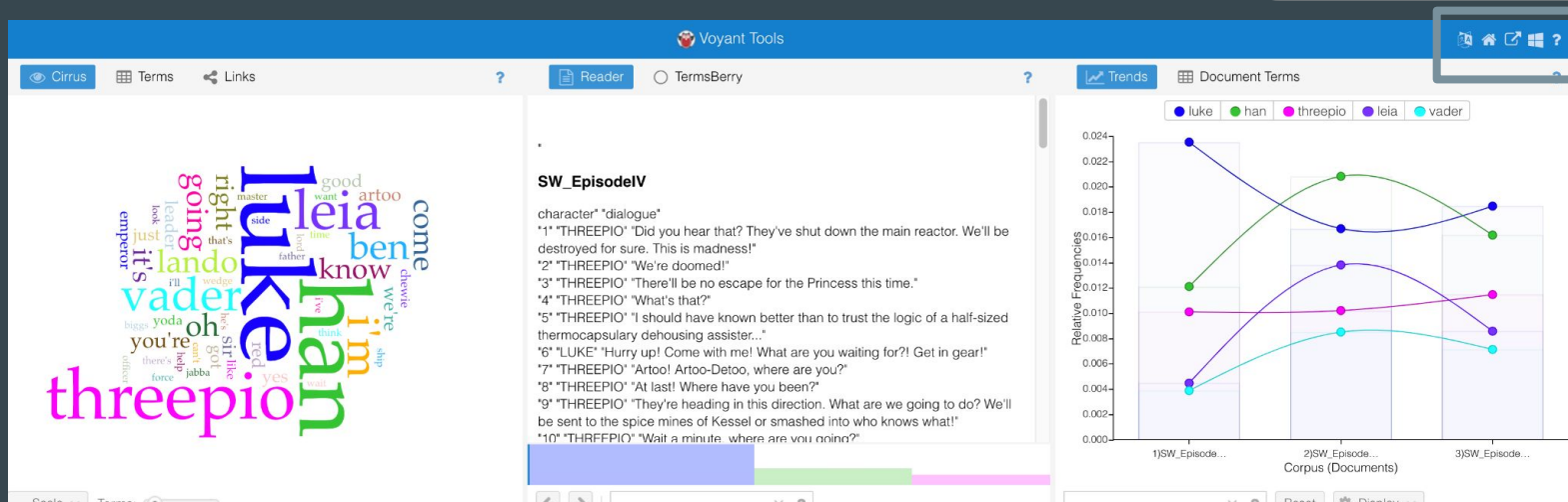
1) 1790 ... genteel family since we came. mr an

Ways to export your corpus

Hover your mouse over the top right corner

Export = the square with an arrow

NOTE this is how you can export the full corpus



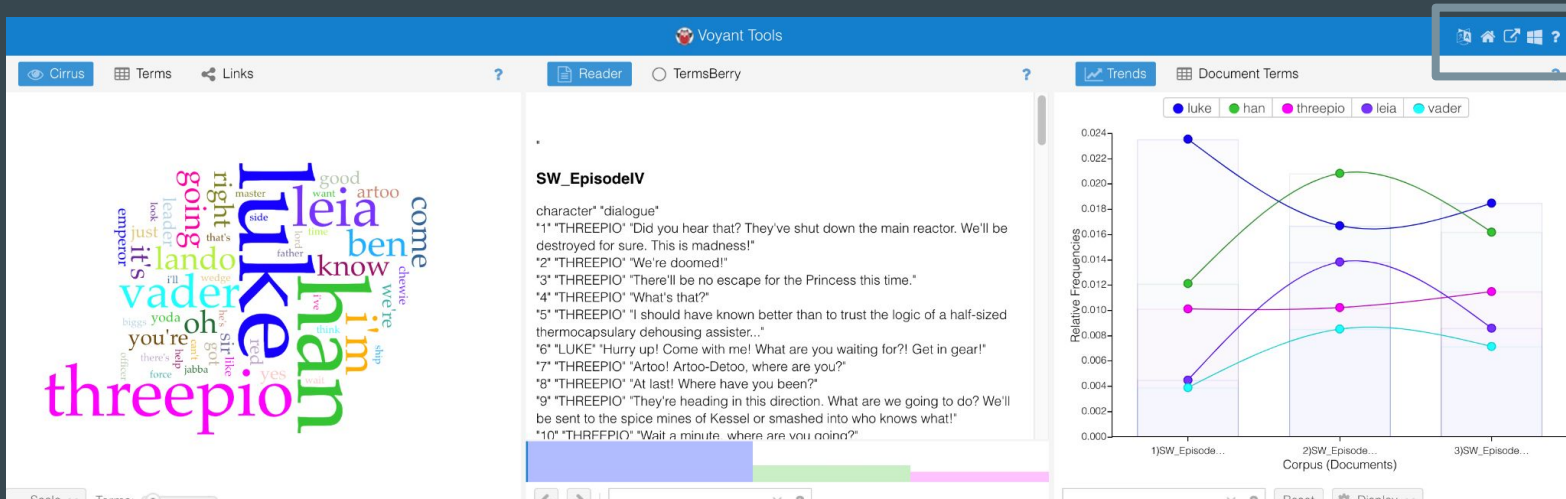
Other parts of toolbar

Left icon (**icon with an A**) = how to change the language

House icon = start over with a new or updated corpus

Window (four squares) **icon** = change the tools in your panel

? icon = help feature



Resources for Continued Learning





Resource List

[Documentation Guide](#) (includes tutorials for all tools)

[Text Mining with Voyant](#) (video tutorial)

[Art History Voyant Tutorial](#) (video)

[SSRC Lab's Voyant Tutorial](#) (includes building a text corpus)

[Text Analysis 101 with Voyant Tools](#)



How to contact us

- To schedule a consultation with a member of the Digital Scholarship team, **fill out our consultation form**
- To email us, contact **dscenter@binghamton.edu**
- If you are interested in receiving our newsletter (launching Spring 2023) **fill out our interest form**



Exit Ticket

Please share any feedback of today's session on
our **exit ticket**