Text Analysis Exercise and Reflection Assignment

Topic: Women's Magazine Correspondents: **Question:** What were everyday women in the 1850s and 1860s asking questions

about?

Strategy: Digital Textual Analysis

Voyant Tools is "a reading and analysis environment for digital texts." It is a way of looking at a large work and measuring things about it such as the frequency and collocation of words. It offers several ways of visualizing this data in a user-friendly



environment that requires little technical background or prior knowledge.

For this exercise, we will use <u>Voyant Tools</u> on a collected corpus of magazine questions and answers from the first secular women's magazine in Britain, *The Englishwoman's Domestic Magazine*. This magazine had over 60,000 readers and they were invited to submit their questions and thoughts to the editors. By doing text analysis on this corpus, we can look for patterns in the things they were interested in, and what the magazine told them in response.

What you will need:

- 1. A text file to be analyzed
- 2. https://voyant-tools.org/ website (or their downloaded software, if you prefer)

To get yourself a text file:

For the main text file, you can download the plain text of the magazine corpus as a .txt file from this GitHub repository: https://github.com/jmsw/edm-correspondence

But there are many other texts you could choose from as well to analyze. If you have a favorite novel that is in the public domain (published before 1920), perhaps you would prefer to choose that. For example, you could pick a text file from a public domain book from the past, such as those at Project Gutenberg https://www.gutenberg.org/ebooks/

They also have other types of public domain texts. For example, here is a copy of *Harper's New Monthly Magazine*, an American magazine from 1852, which has been carefully transcribed through the volunteer efforts of the proofreading team at Distributed Proofreaders (http://www.pgdp.net). Project Gutenberg link for this magazine: https://www.gutenberg.org/ebooks/41629

You could also analyze a long work of fiction, for example, the novel *Middlemarch* by George Eliot, published in 1872: https://www.gutenberg.org/ebooks/145 Their most popular download is Moby-Dick by Herman Melville: https://www.gutenberg.org/ebooks/2701 If you choose a Project Gutenberg book, it is simplest to select the link called "Plain Text UTF-8" from the menu options, to go to the .txt plain text file. That is the link you can paste in at the Voyant Tools website.

What to do at Voyant Tools:

Experiment. When you upload your "corpus" (body of text) to Voyant Tools, it will display several windows with different visualizations based on the data you gave it. Although you can read about what the information in each of these windows mean, don't be afraid to see what you can learn by exploring them intuitively as well.

Play with the tools for a while and see if you can notice some interesting patterns. It is understandable if the interface feels unfamiliar and confusing at first. Nothing you do will wreck or ruin it – you can always start over again with your plain text link and the website.

Hint: If your word cloud is full of words like the, a, an, and other frequent terms, check out "Stopwords" in the UCSC tutorial below. Be sure you have selected the correct language.

Take some time and **try different settings** on the tools to get different outputs. Once you understand what you are looking at in the outputs, keep playing with the data until you see at least one pattern you find meaningful. When you have found something that you think is interesting, or can show us something about the text, or maybe one that surprises you, save a link to that visualization (you can also **screencap** it and save it to turn in with your analysis).

Write a short (200-300 word) reflection about your experience trying out text analysis with Voyant Tools. Use the following **questions** to guide you in your writing but do not feel you must answer them directly: *How did this experience go? What text did you choose? What was it like using the Voyant Tools website? Was this similar to anything you had tried before? What sorts of*

things can we learn from looking at words this way? Why did you choose the image(s) you did to share? What, in your experience and opinion, can this sort of analysis show, and what can't it show, about a work? Include at least one image from your experiments and talk about why you think it is interesting.

For further help:

"An Introduction to Voyant Tools" produced by the librarians of Penn State University: https://guides.libraries.psu.edu/c.php?g=1123281&p=8193323

"Text Analysis using Voyant Tools" from Beth Platte and the Reed College Language Lab: https://blogs.reed.edu/ed-tech/2017/03/text-analysis-using-voyant-tools/

"Voyant Tools Tutorial" by Allen Brown and Bryan Tor of UC Santa Cruz Libraries: https://guides.library.ucsc.edu/DS/Resources/Voyant

"Introduction to Text Analysis" by Sarah Stanley at Florida State University Libraries https://guides.lib.fsu.edu/text-analysis/home

Teacher Notes:

Understanding your students' learning backgrounds as you do, you may wish to do an overhead visualization of an example from a prior text first before setting everyone loose here. Consider early if you would like to provide a set of pre-approved .txt files or if you'd like them to find their own.

If you would like to see some examples of Voyant Tools at work on scholarly projects, there is a gallery of links on their help page. It also has a very detailed walk-through of each possible tool and its affordances - likely too detailed for student use, but likely very helpful for specific questions or problems. One of Voyant Tools' creators, Geoffrey Rockwell, has also created a playlist of screencast tutorials, available at OER Commons.

If students are interested in the frequency of terms over the course of a document, in the Trends pane on Voyant Tools, the <u>Google nGram Viewer</u> can make an interesting counterpoint, looking at the popularity of a term in Google-indexed published works through history.