

Exercise 1: Basic Operations

Timing. Students can complete the exercise in one class period.

Tools required. Voyant Tools and a digital archive such as Project Gutenberg.

Purpose. The purpose of the first exercise, an application of Jockers' initial discussion of close and distant reading methods in the first part of his book, is to become familiar with the basic operations of literary macroanalysis, the complementary techniques of "reading" and "counting." Using Voyant, a useful and accessible suite of tools, students employ a combination of frequency and collocation analysis, data visualization, and close reading—the four fundamental methods used in subsequent exercises in the module—to reveal insight about the deep structure of a literary text. How can we use these techniques to trace the emergence of prominent themes at certain places in the narrative? My primary case study is Mary Shelley's *Frankenstein*, though students may apply the exercise to any literary or historical text.

Step 1. Copy a text file from Project Gutenberg or other digital archive, scrubbing the metadata from the beginning and end of the document.

Step 2. Paste the scrubbed text into Voyant and "reveal" it. When Voyant's paneled interface opens, use the "options" button in the "Summary" panel to apply stop words. Select "English (Taporware)" and check the box to "Apply Stop Words Globally."

Step 3. Building on a class lecture or secondary text, identify a significant critical theme or question to apply to the text using Voyant. Select a series of words associated with this theme from the "Words in the Entire Corpus" panel and mark them as "Favorites," in order to isolate them from the other words in the corpus. For my case study, I began with Tim Blanning's discussion of the sublime in Romantic literature from his book, *The Romantic Revolution*, tagging a series of words the students and I associated with the emotional engagement with wild nature. (You can find this list with the number of occurrences of each word in the Excel file, "Frankenstein Voyant tabular data favorites.")

Step 4. Using the "Favorites" list, experiment with selecting and deselecting various subsets of these thematically weighted words until you find clear collocations indicated

by similar graph patterns in the “Word Trends” panel—that is, places in the book where the words appear in close proximity to each other. (You can find an example of a graph of six such words in the image file, “Frankenstein and sublime chart.” Note the increased frequency and collocations of these words at segments 5 and 7 and the decreased frequency at segment 6.) These graphs will provide a kind of structural signature for the text.

Step 5. Use the graphs identifying collocation of thematically weighted words to identify passages in the text where these words and the associated theme emerge prominently. Clicking at any point on the “Word Trends” graphs will automatically call up the relevant passages in the “Corpus Reader” and “Keywords in Context” panels. Apply close reading to these passages in order to interpret and discuss the structural patterns in the text revealed by Voyant.

Conclusion. In *Frankenstein*, we find generally that words associated with the theme of the sublime appear most frequently in those passages in the novel containing Victor Frankenstein’s dialogue with the creature. We can use this introductory exercise in frequency analysis, collocation, and visualization to frame critical questions about any text. With *Frankenstein*, for example, students might consider Shelley’s reason for using the creature, an artificial being, as a vehicle for exploring some central issues in Romantic philosophy and aesthetics.