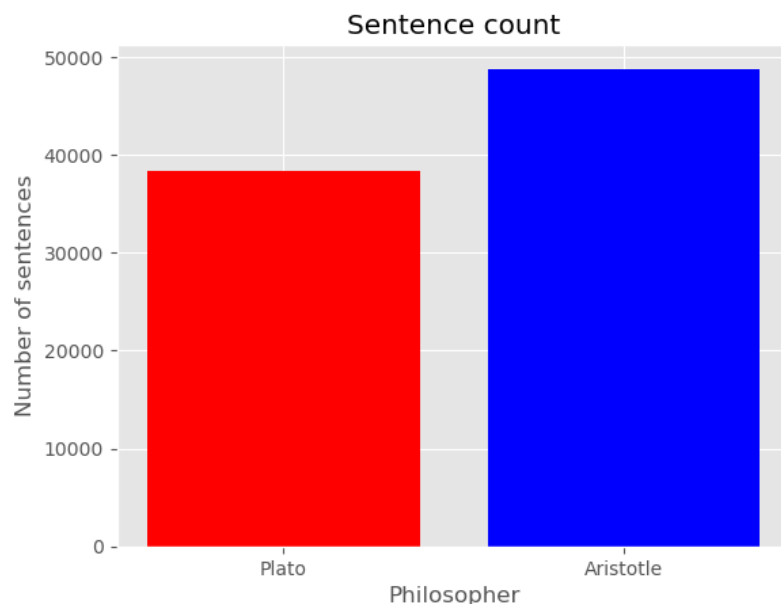# Philosophical Text Analysis of Plato and Aristotle

Plato and Aristotle are regarded among the greatest Western philosophers that have ever lived. The works of both of these philosophers primarily revolved around ethics, science and politics . A comparison of the works of these philosophers is particularly interesting, because although Aristotle, being the student of Plato, was heavily influenced by Plato's works, he still disagreed with many of the notions Plato held about ethical and socio-political views.

This project aims to highlight the differences in philosophies of Plato and Aristotle by analyzing the books "Plato - Complete works" and "Aristotle – Complete works", which are a collection of all the texts written by these philosophers. The comparison will primarily focus on the differences of their opinions regarding ethics, scientific and political views.

Sentence Count:

We will first have a look at how many sentences do we have for analysis for each of the authors.

We have 38366 sentences from Plato's works and 48779 sentences from Aristotle's work.
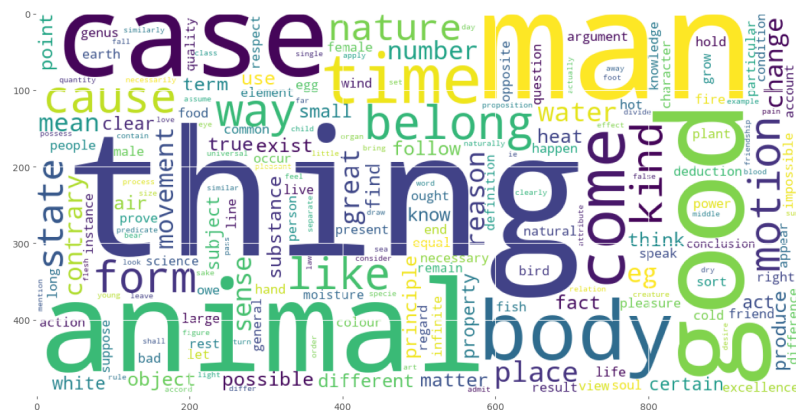
Word Frequency:

We will now try to look at the most common words in the texts of both these authors. For checking this, we will make a word cloud and a bar chart for the most common 20 words in the text.
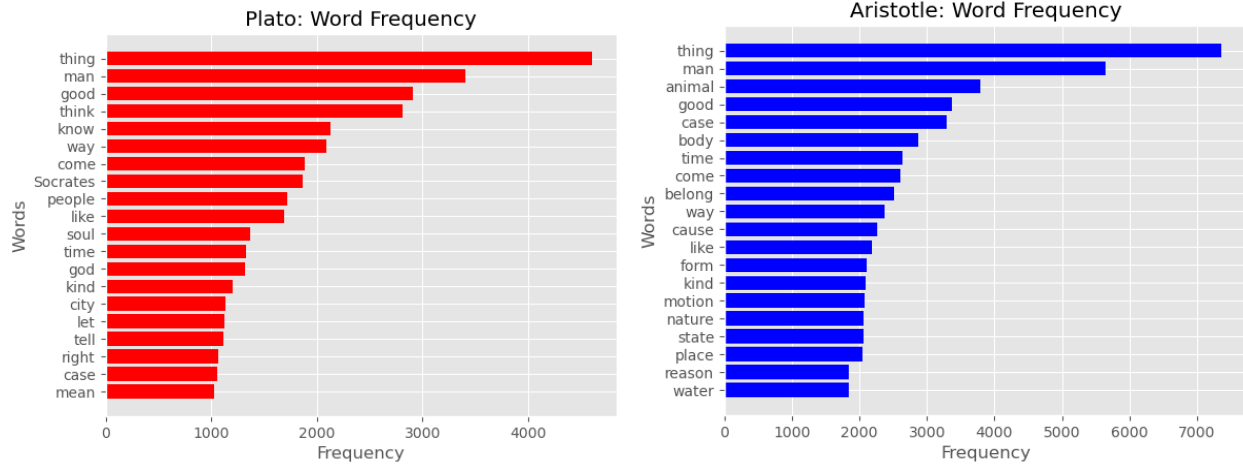
Plato: Word Cloud

Aristotle: Word Cloud

Most common words barchart:
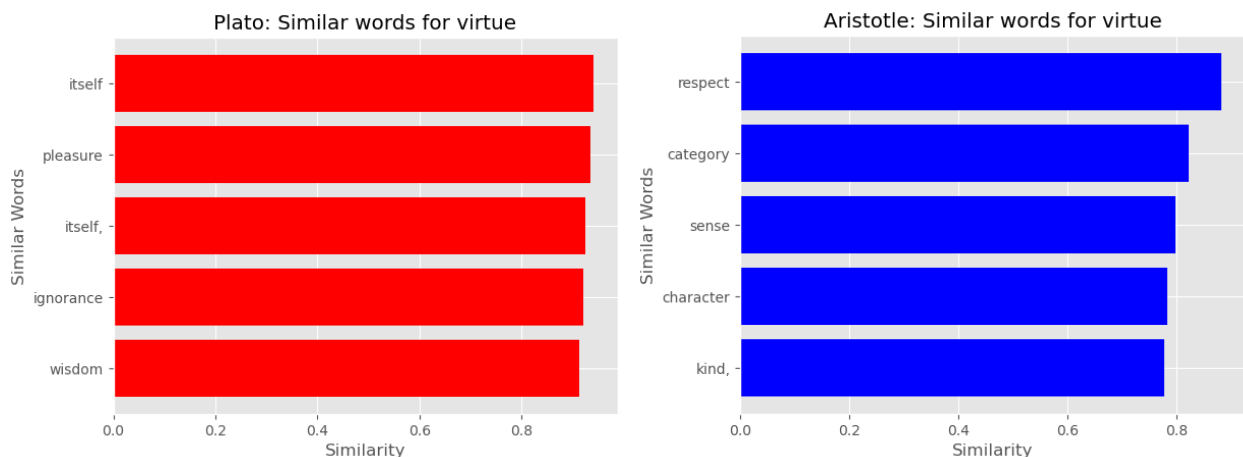

Plato: Word Frequency

Aristotle: Word Frequency

In Aristotle's works we see words like nature, animal, motion, water which were are not present in Plato's work. This is probably because Aristotle works also include Natural Philosophy which includes physics, biology and natural sciences which Plato's works did not include.
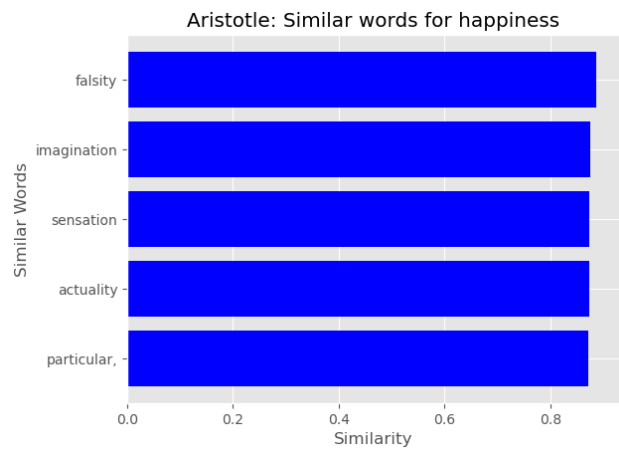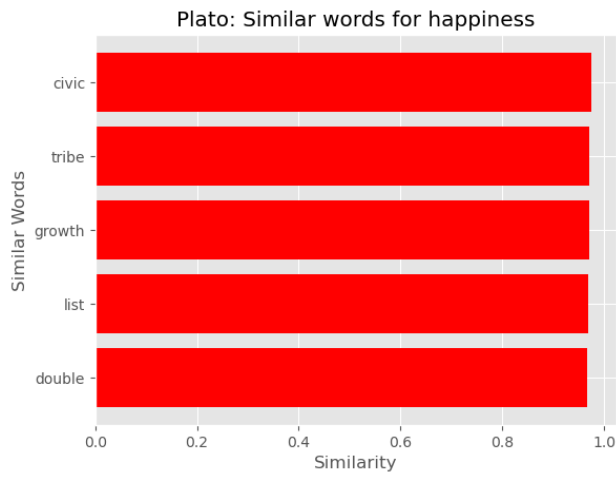
In Plato's most common words we also see Socrates mentioned but Aristotle does not mention any other philosopher frequently. This is because a Plato's works include Socratic dialogues, which are philosophical conversations between two or more individuals in which Socrates is usually the main character.
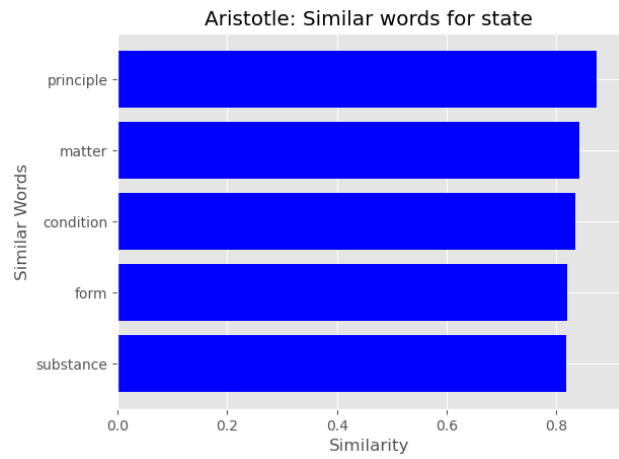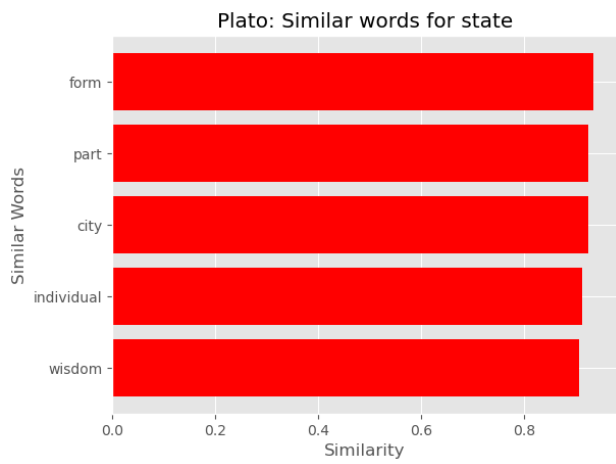
Similar Words:

Here, we will try to see if we can find any differences in the ethical, scientific and political views of the two philosophers by finding words used in similar context to a given word. These words were generated by training a Word2Vec model on the words in Plato's and Aristotle's works individually, and then making a bar plot using the most similar words.
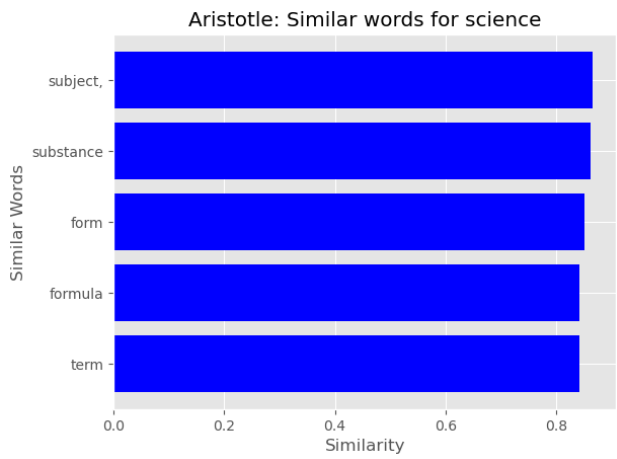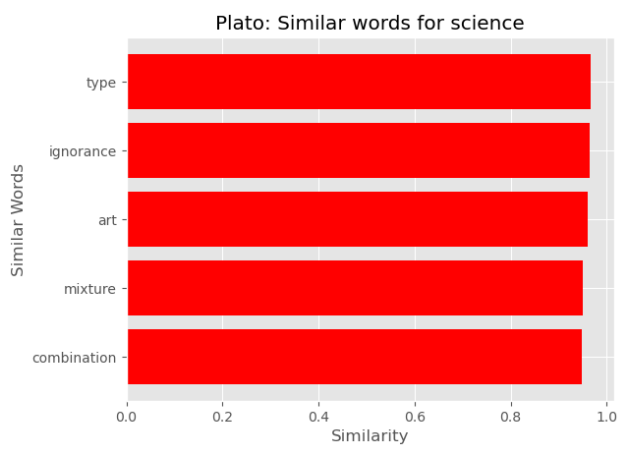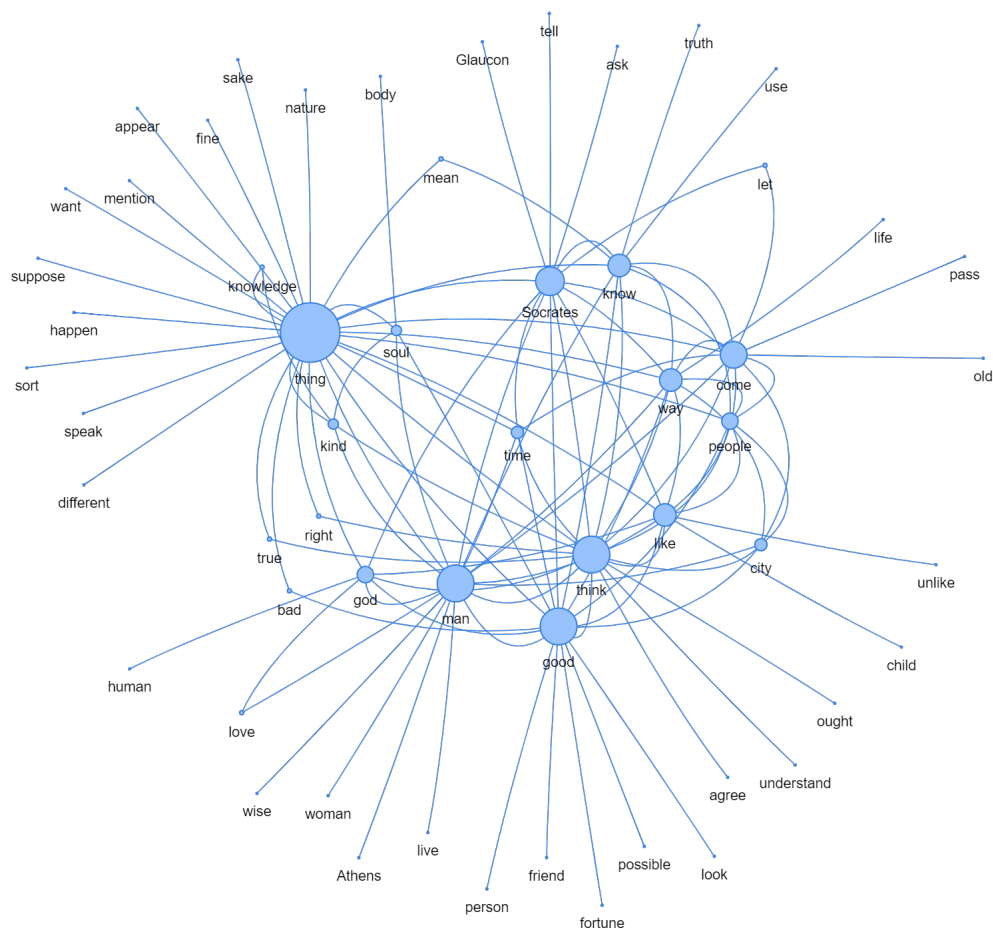
Ethical Views:

Plato: Similar words for virtue

Aristotle: Similar words for virtue

Plato: Similar words for happiness

Aristotle: Similar words for happiness

Polictical Views:

Plato: Similar words for state

Aristotle: Similar words for state

Scientific Views:

Plato: Similar words for science

Aristotle: Similar words for science

Word Network Graph:

Plato:

Aristotle :