How Western science fiction has shown different patterns of development over time

Goal of the project:
The goal of the project is to examine the evolution of Western science fiction over time and identify any patterns or trends in its development. This will involve analyzing the words frequency present in a range of science fiction works from different time periods and using this analysis to draw conclusions about whether science fiction from different periods has textual similarities and whether science fiction from different eras has a more preferred concept.

Research question/hypothesis: How does Western science fiction show different patterns of development over time

Description of the data used:
In these times when technological concepts are constantly impacting our perceptions, science fiction is a literary style that depicts and recreates our complex reality scenarios from a greater density, stronger energy, and more comprehensive holographic perspective. According to the four stages of the development of Western Science fiction over 100 years, i.e. the budding period (1800-1900), the golden period(1930-1960), the new wave period (1960-1980) and the post-newwave period(1980-present).We hope to explore the writing and thematic characteristics of science fiction in different periods by judging the works of the four periods, and to make a comparative analysis

Tool used:
We plan to use Stylo for the similarity analysis of the text and Voyant for the interpretation of the most frequently used concept in science fiction in different periods.

Output chosen:
The final output of our project will be an academic poster containing 3-5 visualised images and 300-500 words of analysis.

Description of the data to be collected:
In terms of data sources, we will download 30 science fiction books in plain text from Project Gutenburg for each period and altogether, the dataset will include 120 books. In terms of the concepts of science fiction, we intend to use specific and precise literary terms from Trope.