# Historical Textual Analysis

CS 585
University of
Massachusetts Amherst

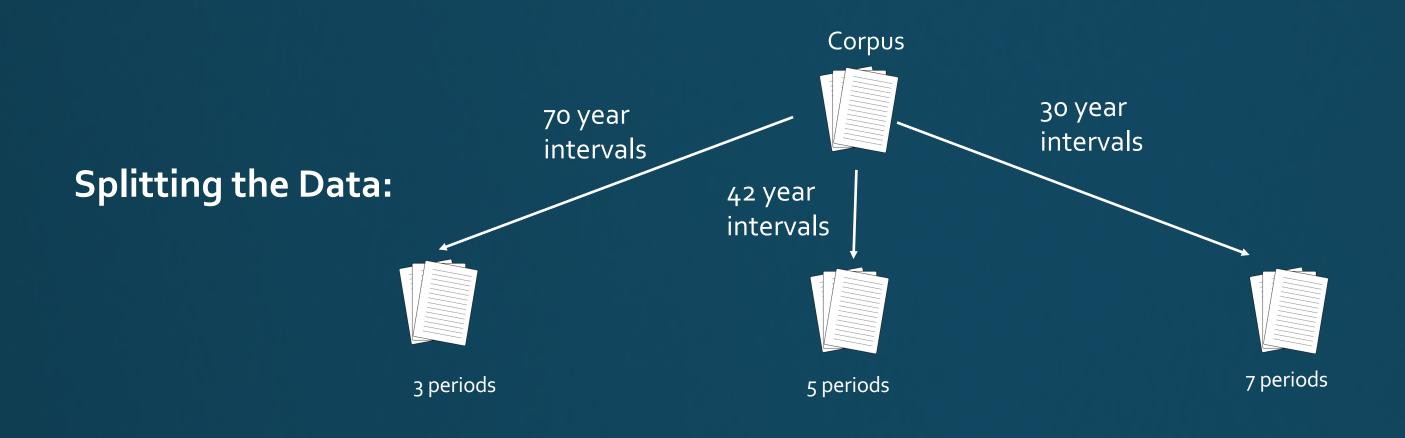
Intro and Data

#### **Research Questions**

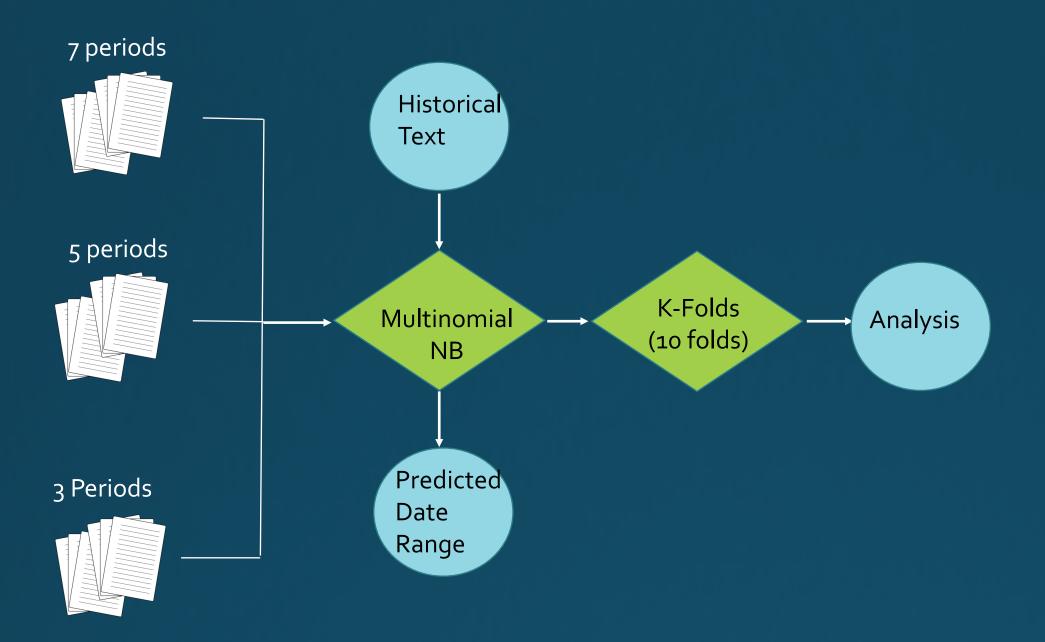
- Can we look at a written document and tell you when it was made with certainty?
- What can we learn about the evolution of writing over time?

### Data:

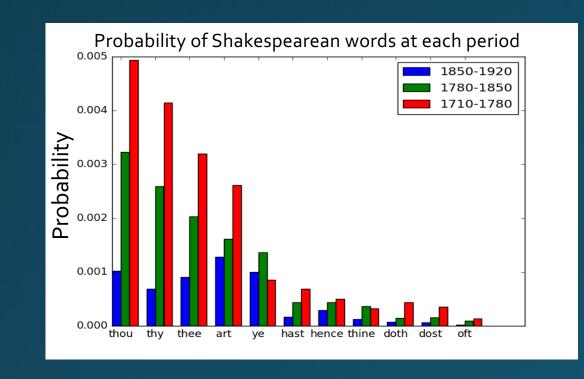
- Corpus of Late Modern English Texts (CLMET)
- Corpus ranges from 1710's-1920's (333 texts)



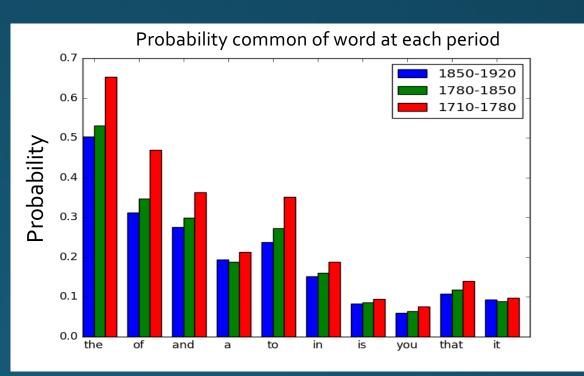
## Model



# Results







# Conclusion

- Using the 3 period approach we can determine the progression of words through these periods with 84.02% precision.
- Lots more training data is needed to accurately predict more specific time periods.
  - The more specific you get the less significant difference you have between texts of that time.
  - By creating more classes you have to divide up your training set into all those classes therefore you need a lot more data to keep up an accurate training regiment.