Assignment4

Andrew Sisitzky
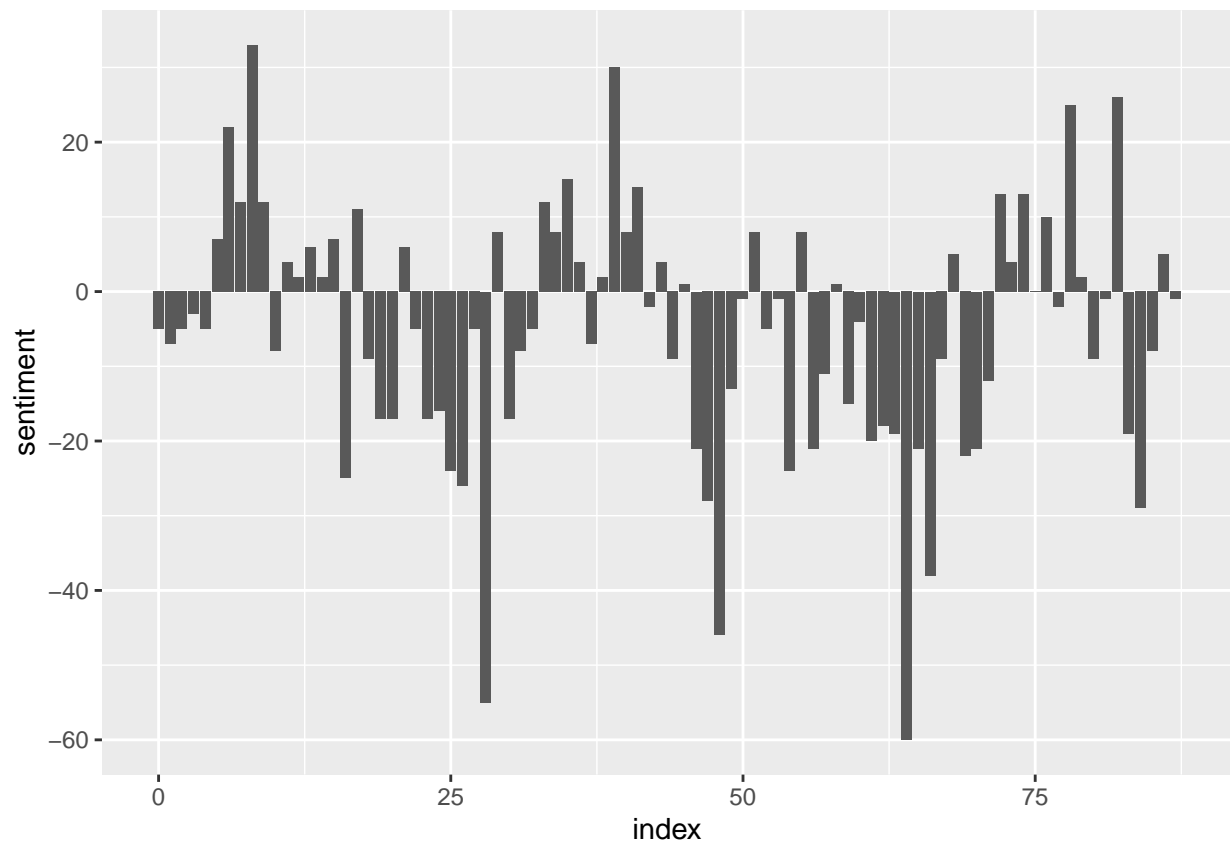
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PARTS I AND II
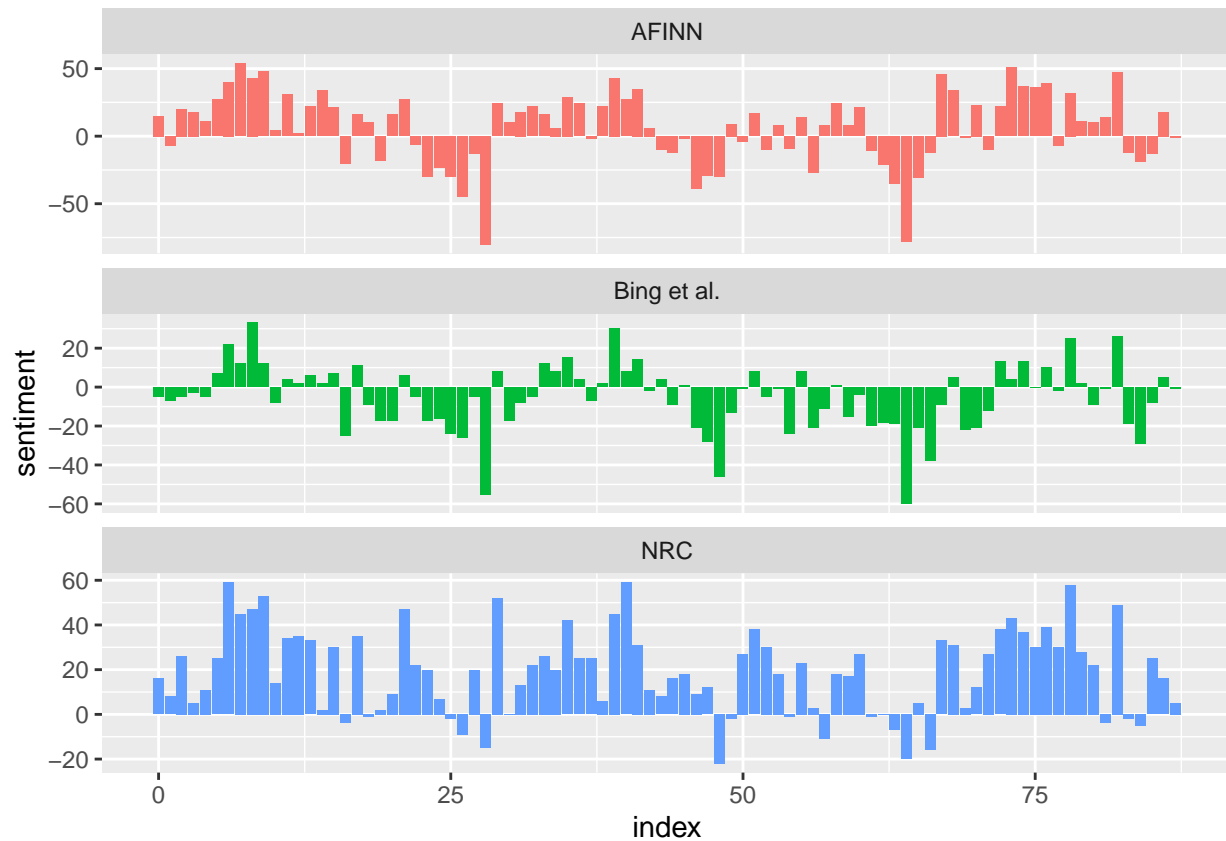
The book that I chose to analyze is The Scarlet Letter by Nathaniel Hawthorne.

```
## # A tibble: 495 x 2
##    word          n
##    <chr>     <int>
##  1 sin          44
##  2 death        42
##  3 evil         42
##  4 shame        40
##  5 infant       32
##  6 prison       30
##  7 scaffold     30
##  8 change       27
##  9 grave        26
## 10 god          22
## # ... with 485 more rows
```
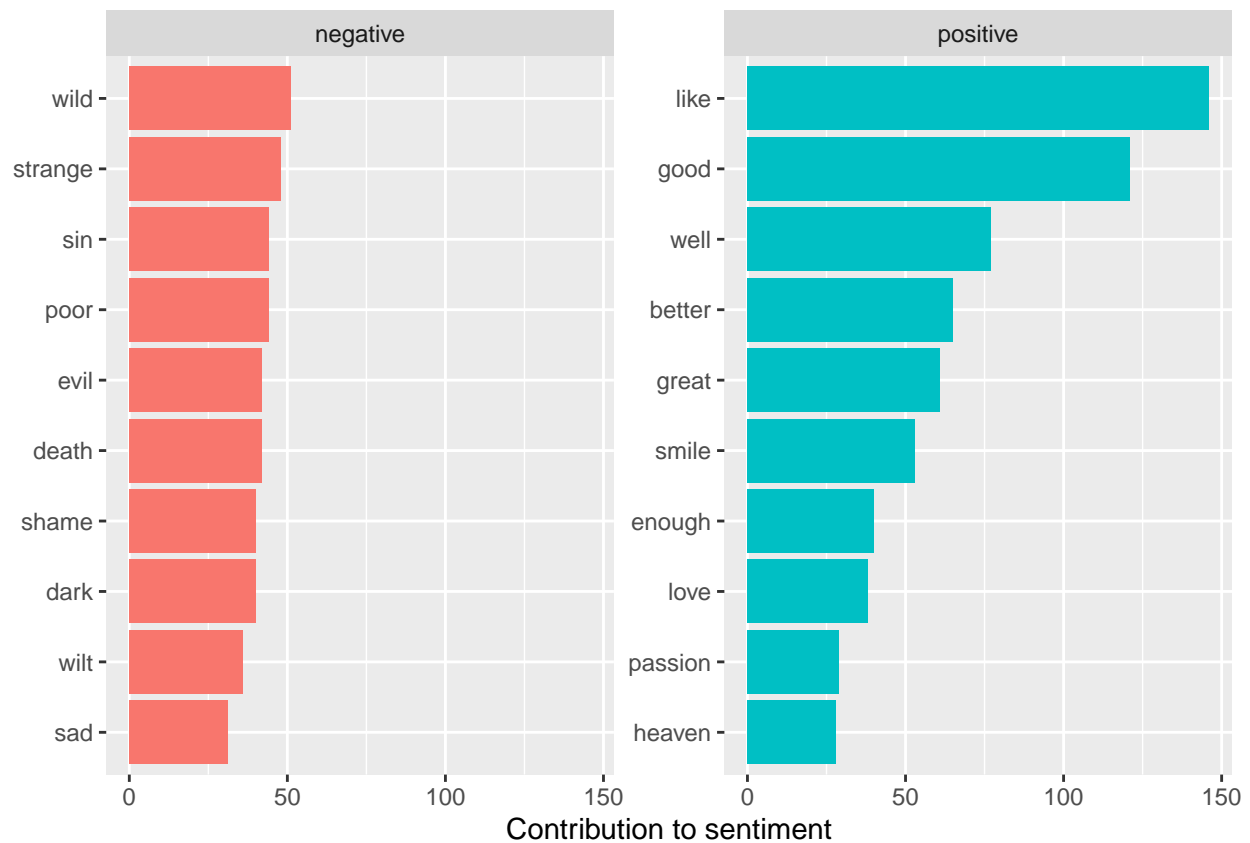
Using the nrc lexicon, I chose to highlight words that were classified under 'fear' as I found this to match up well with the plot of the novel. The words that came up the most in the book were sin, death, evil, and shame.

Then using the bing lexicon, I plotted the sentiment over the course of the book, indexing by 100 lines. In this plot, we see that this book generally using negative words and has three major peaks during which many negative words were used.

I then plotted the sentiemnt analysis of this book using all three lexicons. Here we can see that they each show different levels at every stage. While the bing lexicon we looked at before grades the words as mostly negative throighout the book, we see that AFINN and NRC both tend to show more positive levels. While all three show three distinct negative peaks throughout the story, they all show these peaks to a different degree. Overall, NRC seems to show a generally positive grade with the three peaks looking rather small compared to what is shown by the other lexicons.

When looking at the bing word count, we can see that positive words such as like and good tend to have a higher contribution to the sentiment than other positive words. In terms of negative words, it seems that they tend to have less of an extreme contribution to the sentiment, but rather a higher quantity tend to have an equally high contribution to sentiment.

```
## Joining, by = "word"
```

negative

torture peculiar
trouble dreary ignominy
bitter miserable doubt anguish
die guilty worn tenderness
stern shame fallen guilt
burning broken wrought sorrow fiend
doom dim
solemn mistress pale pain agony
fear sad poor sin fall dead sinful
strange wild object hard
burden lonely evil prison enemy
terrible wilt lost
patient skill like enough golden
mercy quiet best well calm
faith fair work comfort
happiness heaven passion master regard
strong gold
divine bright great rich love holy beautiful
intelligence happy fancy
readily spiritual joy smile
right reverence led worthy
providence beauty peace respect
fame free wise remarkable
dignity

positive

This word cloud that I created highlights the 100 most commonly used words and organizes them based on their sentiment, positive or negative.

PART III

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