

Comparison Barplots

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install and load libraries

```
► library(dplyr)
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► `library(ggplot2)`

► `library(gutenbergr)`

► `library(stringr)`

Access Project Gutenberg

```
df<-gutenberg_works(str_detect(title,'Dracula'))  
df$gutenberg_id  
  
## [1] 345 10150  
  
df$title  
  
## [1] "Dracula" "Dracula's Guest"
```


Download Dracula

```
drac<-gutenberg_download(345)

## Determining mirror for Project Gutenberg from
## http://www.gutenberg.org/robot/harvest
## Using mirror http://aleph.gutenberg.org

colnames(drac)

## [1] "gutenberg_id" "text"

substr(drac$text[500],1,21)

## [1] "my own disappointment"
```

Unpack the words

```
drac_words<-drac%>%  
  unnest_tokens(word,text)  
colnames(drac_words)  
  
## [1] "guttenberg_id" "word"  
  
drac_words$word[498:500]  
  
## [1] "fail" "to" "have"
```

The Bing Lexicon

```
bing<-get_sentiments('bing')
colnames(bing)

## [1] "word"      "sentiment"

bing[498:500,]

## # A tibble: 3 x 2
##       word sentiment
##   <chr>    <chr>
## 1 bereave negative
## 2 bereavement negative
## 3 bereft  negative
```

The Inner Join

```
drac_words<-inner_join(drac_words,bing)
```

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

```
drac_words$gutenberg_id<-NULL
```

```
drac_words[498:500,]
```

```
## # A tibble: 3 x 2
```

```
##       word sentiment
```

```
##    <chr>      <chr>
```

```
## 1    great    positive
```

```
## 2     love    positive
```

```
## 3 crowded    negative
```

Positive Darcula Words

```
drac_pos<-drac_words%>%  
  filter(sentiment=='positive')%>%  
  group_by(word)%>%  
  summarize(count=n(),sentiment=first(sentiment))%>%  
  arrange(count)%>%  
  top_n(10,wt=count)  
  
drac_pos$word<-factor(drac_pos$word,level=drac_pos$word)  
drac_pos[1:5,]  
  
## # A tibble: 5 x 3  
##       word count sentiment  
##   <fctr> <int>      <chr>  
## 1  sweet     66   positive  
## 2  ready     71   positive
```

Negative Darcula Words

```

drac_neg<-drac_words%>%
  filter(sentiment=='negative')%>%
  group_by(word)%>%
  summarize(count=n(),sentiment=first(sentiment))%>%
  arrange(count)%>%
  filter(word!='miss')%>%
  top_n(10,wt=count)
#drac_neg$word<-factor(drac_neg$word,level=drac_neg$word)
drac_neg[1:5,]

```

```

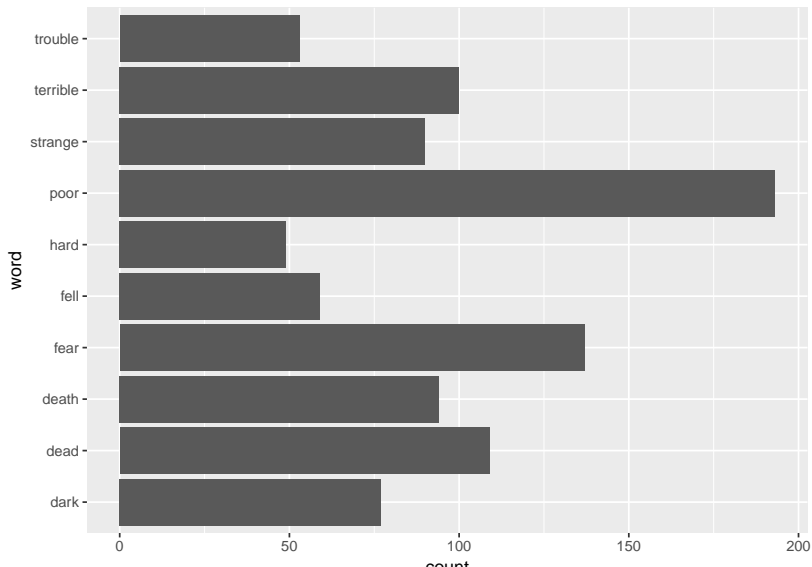
## # A tibble: 5 x 3
##       word count sentiment
##   <chr> <int>      <chr>
## 1   hard    49   negative
## 2 trouble    53   negative

```

Graph of Negative Darcula Words I

```
ggplot()+  
  geom_bar(data = drac_neg, aes(x=word, y=count)  
           , stat='identity')+  
  coord_flip()
```

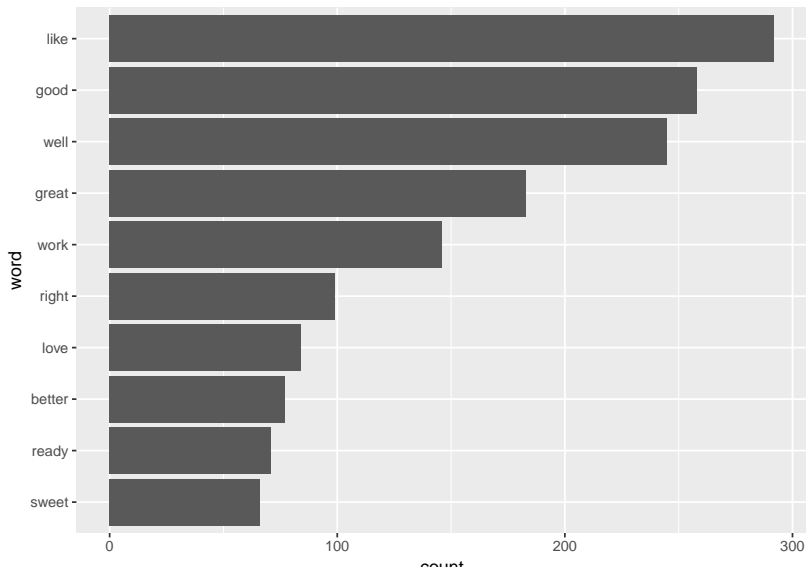
Graph of Negative Darcula Words II



Graph of Positive Darcula Words I

```
ggplot()+  
  geom_bar(data = drac_pos, aes(x=word, y=count)  
           , stat='identity')+  
  coord_flip()
```

Graph of Positive Darcula Words II



comparison Plot for Positive and negative words I

```
drac_compare<-rbind(drac_pos,drac_neg)
compPlot<-ggplot()+
  geom_bar(data=drac_compare,
           aes(x=word,y=count,
               fill=sentiment,
               color=sentiment),
           stat = 'identity')+
  coord_flip()+
  facet_wrap(~sentiment,scales = 'free_y')+
  scale_fill_manual(values=c('green','yellow'))+
  scale_color_manual(values = c('red','pink'))
```

comparison Plot for Positive and negative words II

