Comparison Barplots

Who? Shraddha Dubey

When? November 20, 2017

Outline

install and load libraries

- ```
  library(dplyr)
  ```
  ```

install and load libraries

- ```
  library(dplyr)
  ```
- ```
  library(tidytext)
  ```

install and load libraries

- ```
  library(dplyr)
  ```
- ```
  library(tidytext)
  ```
- ```
  library(ggplot2)
  ```
  ```

install and load libraries

- ```
  library(dplyr)
  ```
- ```
  library(tidytext)
  ```
- ```
  library(ggplot2)
  ```
- ```
  library(gutenbergr)
  ```

install and load libraries

- ```
  library(dplyr)
  ```
- ```
  library(tidytext)
  ```
- ```
  library(ggplot2)
  ```
- ```
  library(gutenbergr)
  ```
- ```
  library(stringr)
  ```
  ```

Access Project Gutenbergr

```
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] "gutenberg_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(sentimen
  arrange(count)%>%
  top_n(10,wt=count)

drac_pos$word<-factor(drac_pos$word,level=drac
drac_pos[1:10,]

## # A tibble: 10 x 3
##       word count sentiment
##     <fctr> <int>     <chr>
##  1  sweet    66  positive
##  2  ready    71  positive
##  3 better    77  positive
##  4   love    84  positive
##  5  right    99  positive
```

Negative Darcula Words

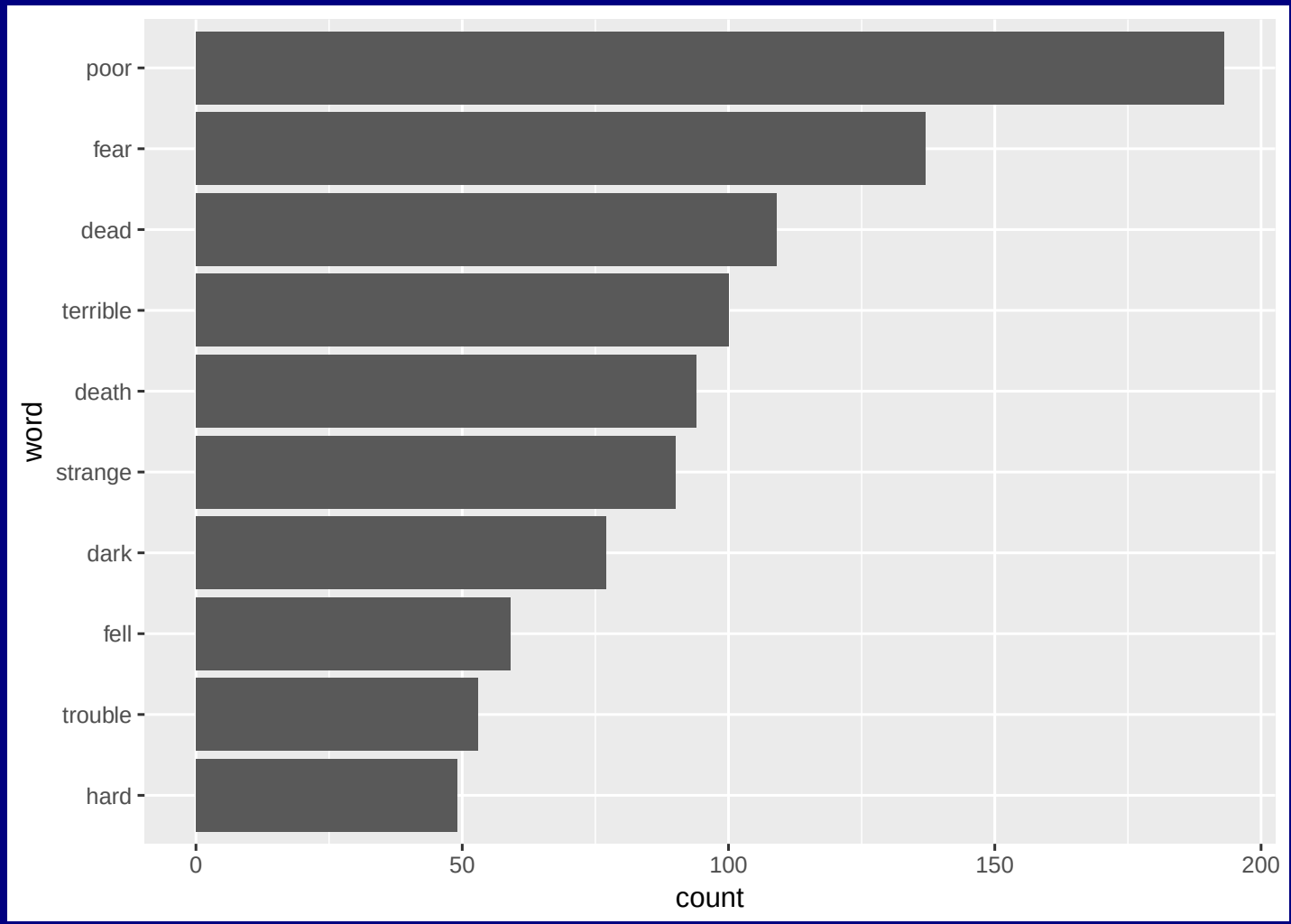
```
drac_neg<-drac_words%>%
  filter(sentiment=='negative')%>%
  group_by(word)%>%
  summarize(count=n(),sentiment=first(sentimen
  arrange(count)%>%
  filter(word!='miss')%>%
  top_n(10,wt=count)
drac_neg$word<-factor(drac_neg$word,level=drac
drac_neg[1:10,]

## # A tibble: 10 x 3
##         word count sentiment
##       <fctr> <int>     <chr>
##  1     hard    49  negative
##  2  trouble    53  negative
##  3     fell    59  negative
##  4     dark    77  negative
##  5  strange    90  negative
```

Graph of Negative Darcula Words I

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

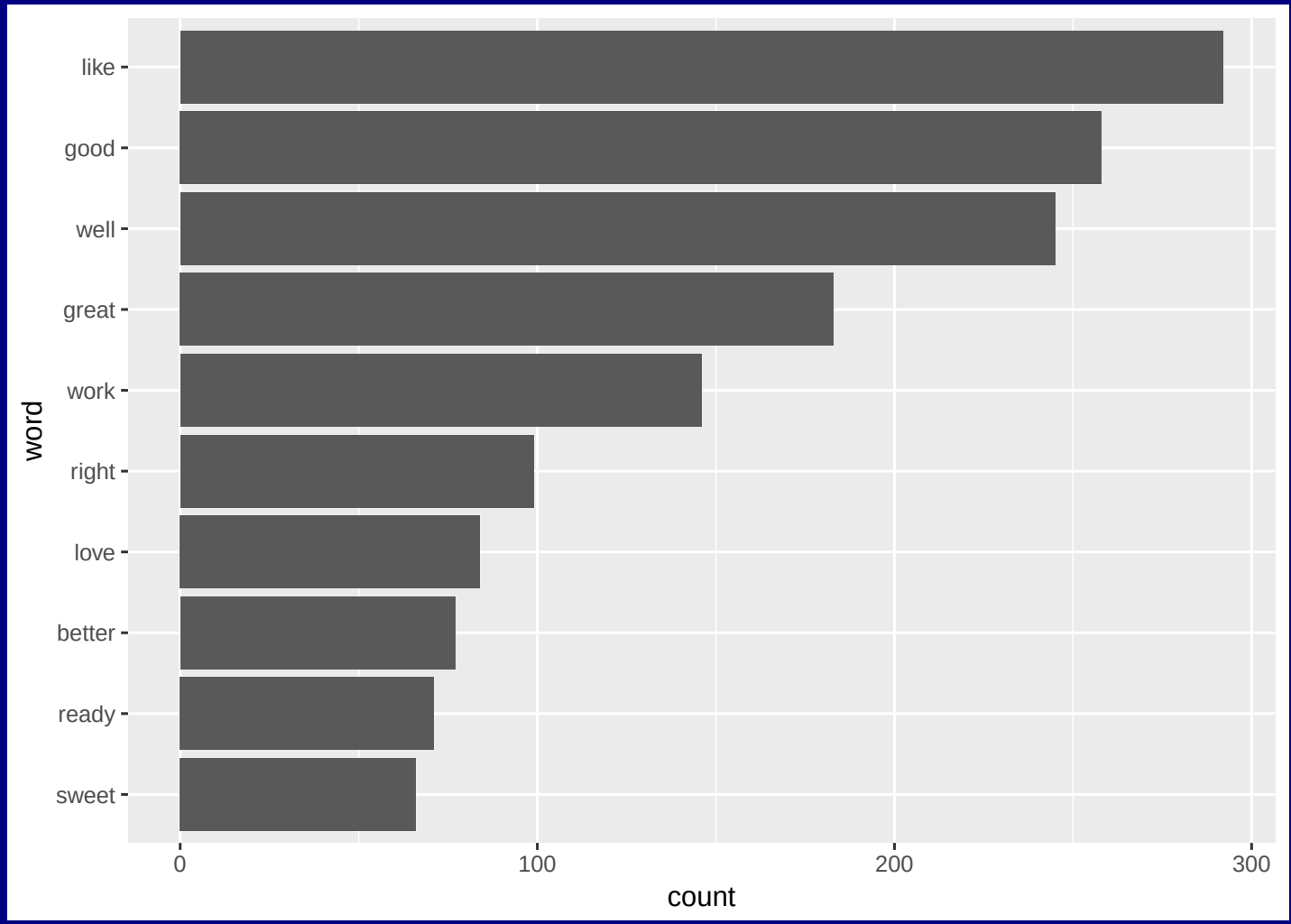
Graph of Negative Darcula Words II



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



comparision 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=sentimen
                                 color=sentime
           stat = 'identity')+
  facet_wrap(~sentiment,scales = 'free_y')+
  scale_fill_manual(values=c('green','yellow'))
  scale_color_manual(values = c('red','pink'))
```

comparision Plot for Positive and negative words II

```
compPlot
```