

Wordcloud with Sentiments: Alice in Wonderland

Judy Minichelli

December 6, 2017

Outline

Install and load libraries

Download Alice in Wonderland text

Remove Chapter Headings

Unpack the Words

The Bing Lexicon

The Inner Join

Assign Sentiments

Wordcloud

Distinguish between Positive from Negative Sentiments

Install and load libraries

- ▶ `library(dplyr)`

Install and load libraries

- ▶ `library(dplyr)`

- ▶ `library(ggplot2)`

Install and load libraries

- ▶ `library(dplyr)`

- ▶ `library(ggplot2)`

- ▶ `library(gutenbergr)`

Install and load libraries

- ▶ `library(dplyr)`

- ▶ `library(ggplot2)`

- ▶ `library(gutenbergr)`

- ▶ `library(stringr)`

Install and load libraries

▶ `library(dplyr)`

▶ `library(ggplot2)`

▶ `library(gutenbergr)`

▶ `library(stringr)`

▶ `library(tidytext)`

Install and load libraries

▶ `library(dplyr)`

▶ `library(ggplot2)`

▶ `library(gutenbergr)`

▶ `library(stringr)`

▶ `library(tidytext)`

▶ `library(wordcloud)`

Install and load libraries

- ▶ `library(dplyr)`
- ▶ `library(ggplot2)`
- ▶ `library(gutenbergr)`
- ▶ `library(stringr)`
- ▶ `library(tidytext)`
- ▶ `library(wordcloud)`
- ▶ `library(wordcloud2)`

Install and load libraries

▶ `library(dplyr)`

▶ `library(ggplot2)`

▶ `library(gutenbergr)`

▶ `library(stringr)`

▶ `library(tidytext)`

▶ `library(wordcloud)`

▶ `library(wordcloud2)`

▶ `library(reshape2)`

Download Alice in Wonderland text

```
alice<-guttenberg_download(11)
```

Remove Chapter Headings

```
alice<-alice%>%  
filter(!str_detect(alice$text, '^CHAPTER'))  
  
alice<-alice[10:3339,]
```

Unpack the Words

```
alice_words<-alice%>%  
unnest_tokens(word,text)
```

The Bing Lexicon

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

The Inner Join

```
alice_words<-inner_join(alice_words,bing)  
alice_words$gutenberg_id<-NULL
```

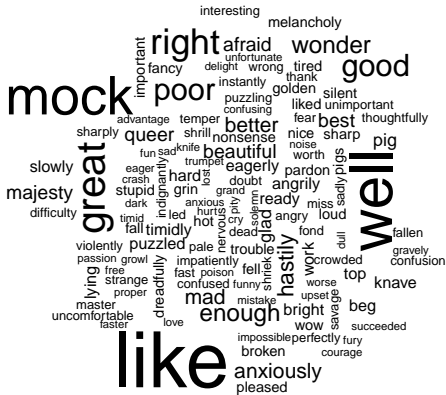
Assign Sentiments I

```
alice_words<-alice_words%>%  
group_by(word)%>%  
summarize(freq=n(),sentiment=first(sentiment))
```


Wordcloud I

```
wordcloud(alice_words$word,alice_words$freq, min.freq = 3)
```

Wordcloud II



Distinguish between Positive from Negative Sentiments I

```
#alice_matrix<-acast(alice_words,word~sentiment,  
                    #value.var='freq',fill=0)  
#comparison.cloud(alice_matrix,colors=c('red','green'))  
  
#Using .png "rplot" below instead of actual plot from code  
  
#so the whole figure is visible on the slide (Heidi's idea,
```

