

The Masque of the Red Death by Edgar Allan Poe Wordcloud

Dayana Moncada

November 6, 2017

Abstract

In this article we construct a wordcloud, using the tidytext R package, for Edgar A. Poe's The Masque of the Red Death novel.

The Masque of the Red Death "The Masque of the Red Death", originally published as "The Mask of the Red Death: A Fantasy" (1842), is a short story by Edgar Allan Poe. The story follows Prince Prospero's attempts to avoid a dangerous plague, known as the Red Death, by hiding in his abbey. He, along with many other wealthy nobles, hosts a masquerade ball within seven rooms of the abbey, each decorated with a different color. In the midst of their revelry, a mysterious figure disguised as a Red Death victim enters and makes his way through each of the rooms. Prospero dies after confronting this stranger, whose "costume" proves to contain nothing tangible inside it; the guests also die in turn

1 The gutenbergr Package

Download and process public domain works in the Project Gutenberg collection <http://www.gutenberg.org/>. Includes metadata for all Project Gutenberg works, so that they can be searched and retrieved.

```
library(gutenbergr)
gutenberg_works(author == "Poe, Edgar Allan")

## # A tibble: 16 x 8
##   gutenbergr_id
##           <int>
## 1             932
## 2            1062
## 3            1063
## 4            1064
## 5            1065
## 6            2147
```

```
## 7      2148
## 8      2149
## 9      2150
## 10     2151
## 11     8893
## 12     10031
## 13     25525
## 14     32037
## 15     45484
## 16     50852
## # ... with 7 more variables: title <chr>, author <chr>,
## #   gutenbergs_id <int>, language <chr>, gutenbergs_bookshelf <chr>,
## #   rights <chr>, has_text <lgl>

poe<-gutenberg_download(1064)
```

Now we are ready for some data cleaning.

2 The Wordcloud

To make the wordcloud, we first have to break up the lines into words. We can use a function from the tidytext package for this:

```
library(dplyr)
library(tidytext)
poe_words<-poe%>%
  unnest_tokens(word,text)
```

We can remove common, unimportant words with the stop_words data frame and some dplyr:

```
poe_words<-poe_words%>%
  filter(!(word %in% stop_words$word))

poe_words

## # A tibble: 921 x 2
##   gutenbergs_id      word
##         <int>    <chr>
## 1         1064  masque
## 2         1064    red
## 3         1064  death
## 4         1064  edgar
## 5         1064  allan
## 6         1064    poe
```

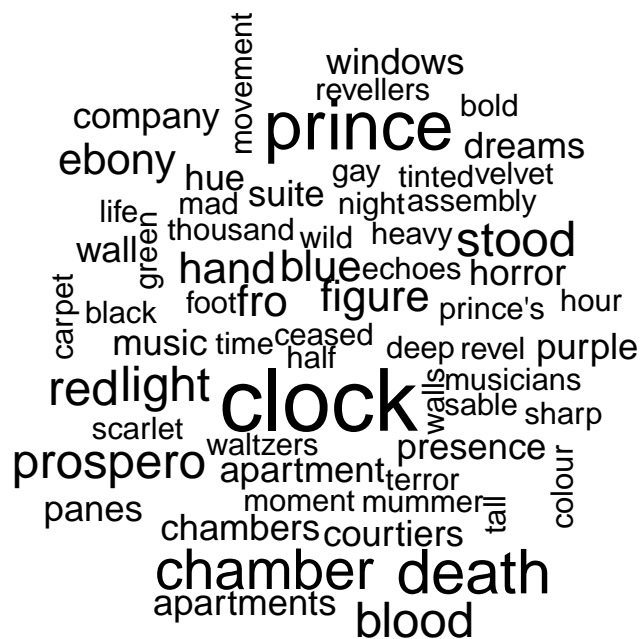
```
## 7      1064      red
## 8      1064     death
## 9      1064 devastated
## 10     1064    country
## # ... with 911 more rows
```

Now, we need to calculate the frequencies of the words in the novel. Again, we can use standard dplyr techniques for this:

```
library(dplyr)
poe_freq<-poe_words%>%
  group_by(word)%>%
  summarize(count=n())
```

Finally, it's time to generate the wordcloud:

```
library(wordcloud)
wordcloud(poe_freq$word,poe_freq$count)
```



References

- Feinerer, I. and Hornik, K. (2017). *tm: Text Mining Package*. R package version 0.7-1.
- Fellows, I. (2014). *wordcloud: Word Clouds*. R package version 2.5.
- Poe, E. A. (2007). *The Masque of the Red Death*.
- Robinson, D. (2017). *gutenbergr: Download and Process Public Domain Works from Project Gutenberg*. R package version 0.1.3.
- Robinson, D. and Silge, J. (2017). *tidytext: Text Mining using 'dplyr', 'ggplot2', and Other Tidy Tools*. R package version 0.1.4.
- Silge, J. and Robinson, D. (2017). *Text Mining with R: A Tidy Approach*.

- Wickham, H. (2017). *stringr: Simple, Consistent Wrappers for Common String Operations*. R package version 1.2.0.
- Wickham, H., Francois, R., Henry, L., and Miller, K. (2017). *dplyr: A Grammar of Data Manipulation*. R package version 0.7.4.
- Wickham, H. and Grolemund, G. (2017). *R for Data Science*.