Emma_Gillen_719_Final.R

Emma

2020-12-03

```r
######
# Emma Gillen
# IST 719
# Final Project
# Goodreads Dataset
######

# Packages
library(stringr)
library(plyr)
library(scales)
library(wordcloud)
```

Loading required package: RColorBrewer

```r
library(tidytext)
library(stringr)

books_df <- read.csv("C:\\Users\\Emma\\Documents\\Syracuse\\IST 719\\Final Project\\books.csv", strings

#############################
# Initial Data Summary & Cleaning

# structure of the data
str(books_df)
```

```
## 'data.frame':    11131 obs. of  12 variables:
##  $ bookID           : chr  "1" "2" "4" "5" ...
##  $ title            : chr  "Harry Potter and the Half-Blood Prince (Harry Potter  #6)" "Harry Potter
##  $ authors          : chr  "J.K. Rowling/Mary GrandPré" "J.K. Rowling/Mary GrandPré" "J.K. Rowling
##  $ average_rating   : chr  "4.57" "4.49" "4.42" "4.56" ...
##  $ isbn             : chr  "0439785960" "0439358078" "0439554896" "043965548X" ...
##  $ isbn13           : chr  "9780439785969" "9780439358071" "9780439554893" "9780439655484" ...
##  $ language_code    : chr  "eng" "eng" "eng" "eng" ...
##  $ num_pages        : chr  "652" "870" "352" "435" ...
##  $ ratings_count    : int  2095690 2153167 6333 2339585 41428 19 28242 3628 249558 4930 ...
##  $ text_reviews_count: int  27591 29221 244 36325 164 1 808 254 4080 460 ...
##  $ publication_date : chr  "9/16/2006" "9/1/2004" "11/1/2003" "5/1/2004" ...
##  $ publisher        : chr  "Scholastic Inc." "Scholastic Inc." "Scholastic" "Scholastic Inc." ...
```

```r
# converting rating, # review, # ratings, pages to numeric
books_df$average_rating <- as.numeric(books_df$average_rating)
```

Warning: NAs introduced by coercion

```r
books_df$ratings_count <- as.numeric(books_df$ratings_count)
books_df$text_reviews_count <- as.numeric(books_df$text_reviews_count)
books_df$num_pages <- as.numeric(books_df$num_pages)
```

Warning: NAs introduced by coercion

```r
# converting publication date to date type
books_df$clean_publication_date <- strptime(books_df$publication_date, "%m/%d/%Y")

# removing rows
                                                                    # 11131
# removing books with less than 10 reviews
# these book are either too new or too obscure to be relevant
books_df <- books_df[books_df$ratings_count >= 10,]                 # 10458
# removing books with less than 100 pages
books_df <- books_df[books_df$num_pages >= 100,]                    # 9592
# 12 rows had NAs (2 already removed)
# because there are very few, they can just be dropped
books_df <- na.omit(books_df)                                       # 9584
# cleaning extra text from the authors and titles
books_df$clean_author <- str_replace(books_df$authors, "/.*", "")

#######################
# REUSED
# single plot color
my.color <- "red"
# Single books vs. collections
single.color <- "darkgreen"
coll.color <- "firebrick3"
# rating colors
good.color <- "green"
bad.color <- "red"

#########################
# Single Dimension plot 1
# Density plot
# Book rating

d_pages <- density(books_df$average_rating)
plot(d_pages, main = "Density of Book Ratings", xlab = "Average Rating")
polygon(d_pages, col=my.color, border = my.color)
```
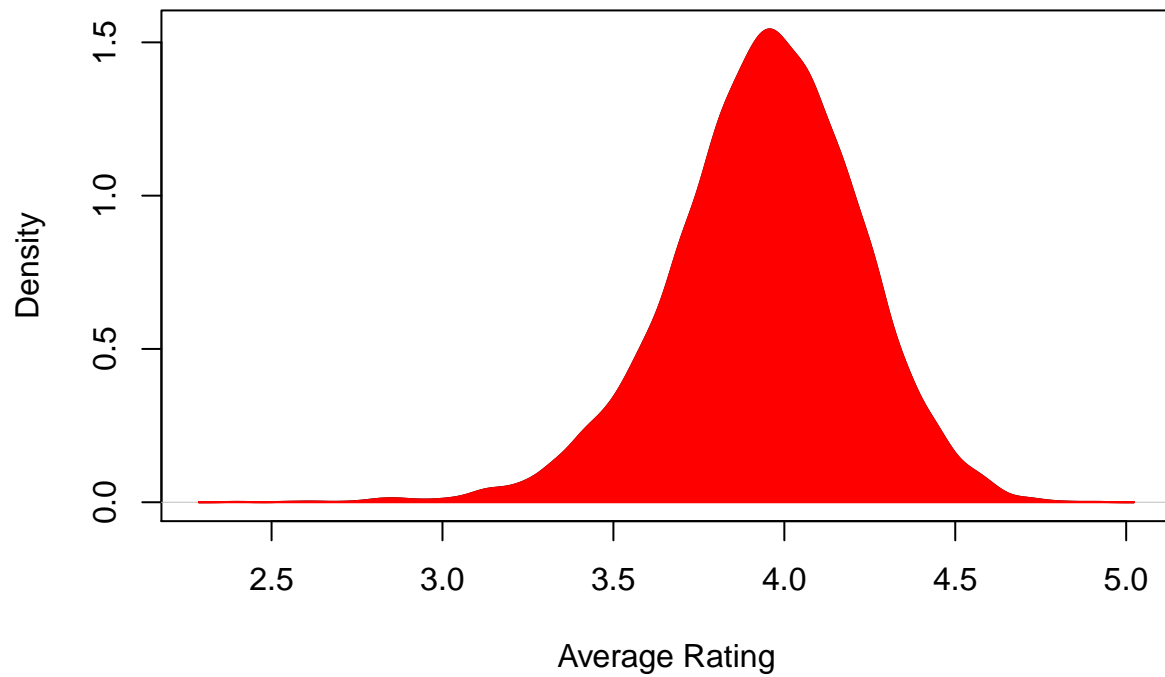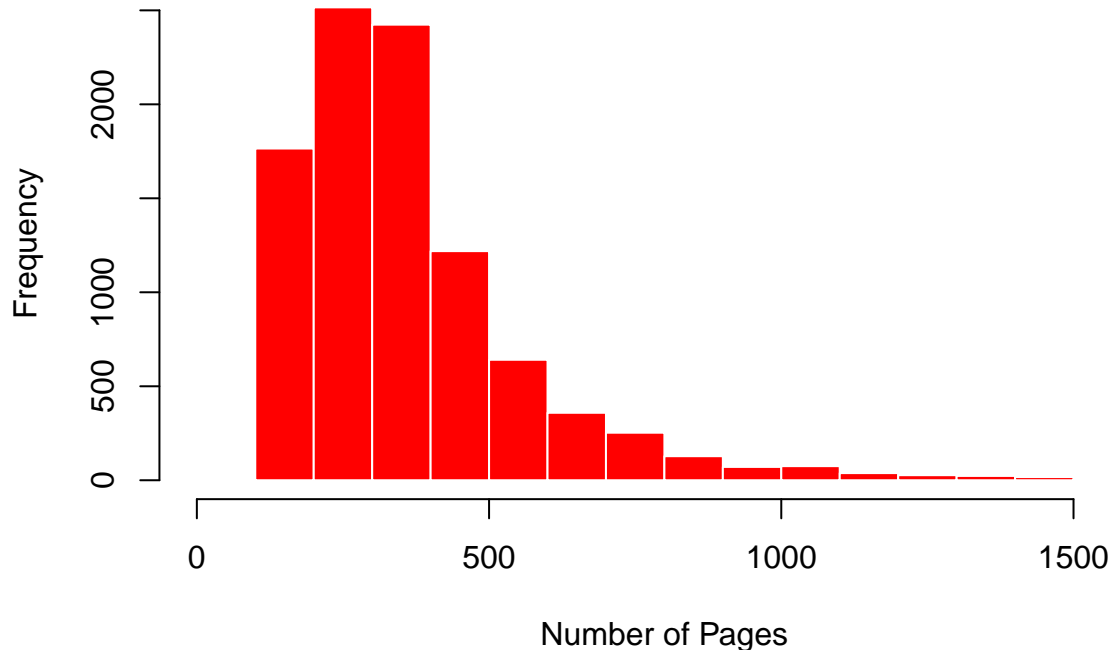
Density of Book Ratings


```
# most of the ratings are between 3.5 and 4.5
#summary(books_df$ratings_count)

#########################
# Single dimension plot 2
# Histogram
# Book length

hist(books_df$num_pages, breaks = 50, col = my.color, border = "white"
     , main = "Histogram of Book Lengths", xlab = "Number of Pages", xlim = c(0, 1600))
```

Histogram of Book Lengths


```r
# there are some outliers that scew the chart past 1600, 21, but cant be seen on the chart

#########################
# Multi dimension plot 1
# Barplot
# Average rating
# Author
# Book title

books_df$clean_title <- tolower(books_df$title)
books_df$clean_title <- str_replace_all(books_df$clean_title, "\\(.*\\)", "")

# cleaning extra characters and adjectives from the titles
books_df$clean_title <- str_replace_all(books_df$clean_title, "annotated", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, " the ", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, " and ", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "part 2", "part ii")
books_df$clean_title <- str_replace_all(books_df$clean_title, "part 1", "part i")
books_df$clean_title <- str_replace_all(books_df$clean_title, "[0-9] volumes set", "")
books_df$clean_title <- gsub("[[:punct:]]", "", books_df$clean_title)
books_df$clean_title <- str_replace_all(books_df$clean_title, "shakespeares", "")
books_df$clean_title <- str_trim(books_df$clean_title)
books_df$clean_title <- str_replace_all(books_df$clean_title, " ", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "thecomplete.*", "completeworks")
books_df$clean_title <- str_replace_all(books_df$clean_title, "volume.*", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "vol.*", "")
```

```r
books_df$clean_title <- str_replace_all(books_df$clean_title, "[0-9]", "")
# addition JRR Tolkein cleaning
books_df$clean_title <- str_replace_all(books_df$clean_title, "ortherebackagain", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "thelordofringsmillenniumeditionboxedset"
books_df$clean_title <- str_replace_all(books_df$clean_title, "thelordofringshobbit", "thehobbit")
#Additional Shakespeare cleaning
books_df$clean_title <- str_replace_all(books_df$clean_title, "princeofdenmark", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "textsof16031623", "")
books_df$clean_title <- str_replace_all(books_df$clean_title, "orwhatyouwill", "")

# finding how many unique titles an author has published
works_by_authors <- aggregate(books_df$clean_title, list(books_df$clean_author), FUN=function(x) length
# only taking authors with more than 20 published works in the DB
prolific_authors  <- works_by_authors[works_by_authors$x > 22,]

colnames(prolific_authors) <- c("clean_author", "book_count")
rownames(prolific_authors) <- prolific_authors$clean_author
prolific_authors_df <- join(books_df, prolific_authors, by="clean_author", type = "right")

# taking the average rating for these most published authors
prolific_authors_ratings <- aggregate(prolific_authors_df$average_rating, list(prolific_authors_df$clean
colnames(prolific_authors_ratings) <- c("clean_author", "ratings")

barplot(prolific_authors_ratings$ratings, las=1,  horiz = T
        , cex.names = .6, xpd = FALSE
        , border = NA
        , names.arg = prolific_authors_ratings$clean_author
        , main = "Average Rating by Most Prolific Authors"
        , sub = "Authors with over 20 works in the database"
        , xlim = c(3,4.5))
```
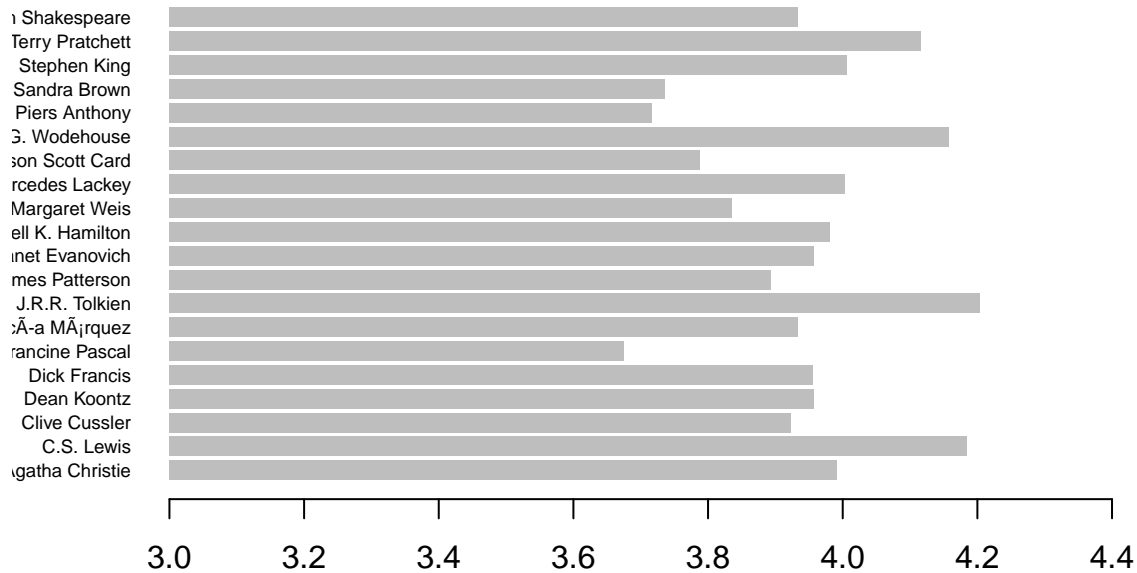
Average Rating by Most Prolific Authors

n Shakespeare
Terry Pratchett
Stephen King
Sandra Brown
Piers Anthony
G. Wodehouse
son Scott Card
rcedes Lackey
Margaret Weis
ell K. Hamilton
net Evanovich
mes Patterson
J.R.R. Tolkien
cÃa MÃ¡rquez
rancine Pascal
Dick Francis
Dean Koontz
Clive Cussler
C.S. Lewis
gatha Christie

3.0   3.2   3.4   3.6   3.8   4.0   4.2   4.4

Authors with over 20 works in the database

```r
##########################
# Multi dimension plot 2
# Barplot
# Average rating
# Book Title
# Number of Reviews

# using the same clean title variable
reviews_by_title <- aggregate(books_df$ratings_count, list(books_df$clean_title), sum)
# taking titles with more than 1.5 million reviews
reviews_by_title <- reviews_by_title[reviews_by_title$x > 1450000,]
colnames(reviews_by_title) <- c("clean_title", "total_reviews")
reviews_by_title_df <- join(books_df, reviews_by_title, by="clean_title", type = "right")

top_reviewed_ratings <- aggregate(reviews_by_title_df$average_rating, list(reviews_by_title_df$clean_ti
colnames(top_reviewed_ratings) <- c("title", "ratings")

par(mar= c(6,10,6,2))
barplot(top_reviewed_ratings$ratings
        , las=1,  horiz = T
        , cex.names = .6, xpd = FALSE
        , border = NA
        , names.arg = top_reviewed_ratings$title
        , main = "Average Rating by Most Reviewed Titles"
        , sub = "Titles with over 1.5 million reviews in the database"
        , xlim = c(3,4.5))
```
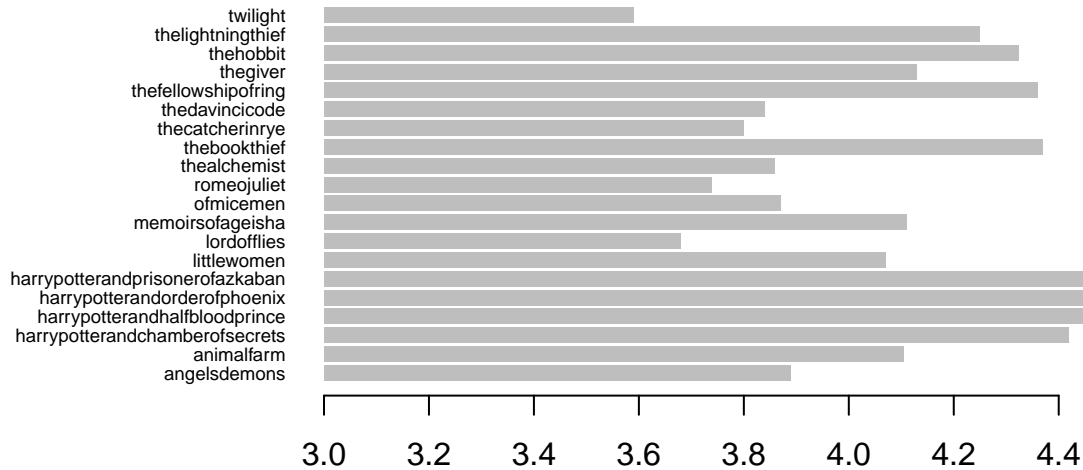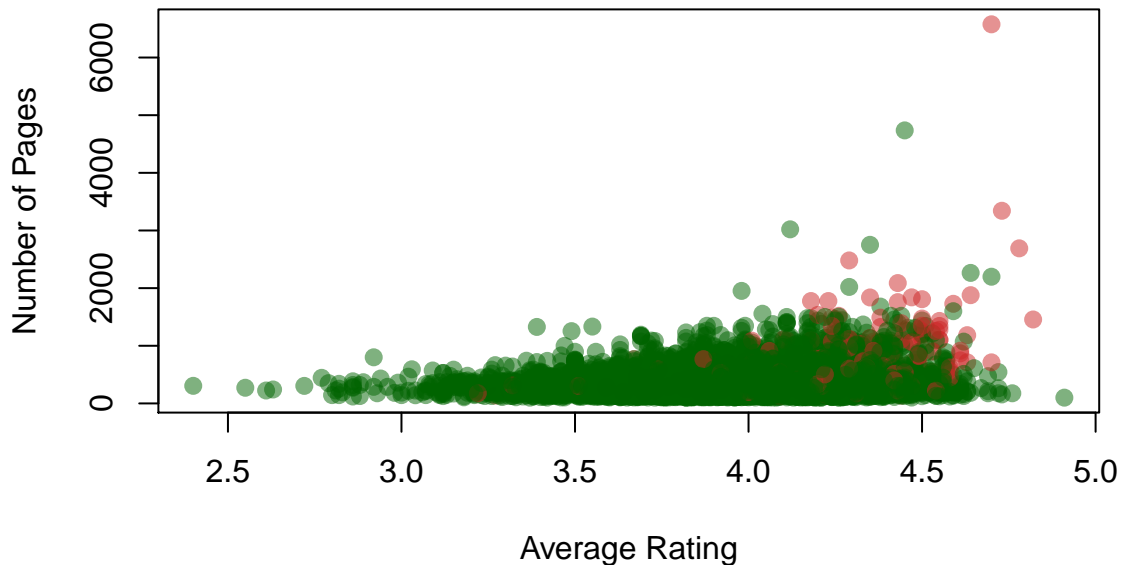
Average Rating by Most Reviewed Titles

Titles with over 1.5 million reviews in the database

```
##########################
# Multi dimension plot 3
# Scatterplot
# Page length
# Average rating


# using color to indicate books containing mulitple works
page_col.vec <- rep(single.color, nrow(books_df))
page_col.vec[grep("Boxed", books_df$title)] <- coll.color
page_col.vec[grep("Collect", books_df$title)] <- coll.color
page_col.vec[grep("Complete", books_df$title)] <- coll.color
page_col.vec[grep("Works", books_df$title)] <- coll.color
page_col.vec[grep("Volumes", books_df$title)] <- coll.color
page_col.vec[grep("Anthology", books_df$title)] <- coll.color
page_col.vec[grep("Novels", books_df$title)] <- coll.color
page_col.vec[grep("Diction", books_df$title)] <- coll.color
page_col.vec[grep("Volumes", books_df$title)] <- coll.color

par(mar= c(6,6,6,2))
plot(books_df$average_rating, books_df$num_pages
     , pch = 16, cex = 1.25
     , main = "Number of Pages by Average Rating"
     , xlab = "Average Rating"
     , ylab = "Number of Pages"
     , col = alpha(page_col.vec, 0.5))
```

Number of Pages by Average Rating


```r
#########################
# Single dimension plot 3
# Word cloud
# Book title

# getting all of the words that make up the titles and cleaning them
words <- str_extract_all(books_df$title, "[A-Za-z]+",simplify = T)
words <- tolower(words)
words <- gsub("#|[[:punct:]]", "", words)
words.tab <- sort(table(words), decreasing = T)
# removing words appearing less than 3 times
zap <- which(words.tab < 3)
words.tab <- words.tab[-zap]

# making a new df for the word cloud words and counts
df <- data.frame(words = names(words.tab), count = as.numeric(words.tab)
                 , stringsAsFactors = F)

stop_words <- c("", "the", "a", "an", "for", "from", "as", "so", "of", "and", "or", "nor", "no", "far",
                "with", "in", "of", "to", "on", "at", "if", "are", "was", "were", "is", "like", "has",
                "its", "do", "will", "be", "then", "there", "their", "this", "that", "other","he", "she
                "me", "my", "his", "her", "it", "own", "we", "us", "them", "cr", "st", "nin", "re", "nd
                "book", "novel", "novels","books", "story", "letters", "writings", "stories", "essays",
                "biography", "trilogy", "chronciles", "anthology", "text", "letters", "autobiography",
                "by", "how", "collected", "complete", "tales", "saga", "works", "guide", "notes", "illu
                "one", "two", "three", "four", "five", "six", "seven", "eight", "nine", "ten", "i", "ii
```

```r
                        "a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o","p", "q", "r"
                        "vol", "volume", "part", "sir", "mr", "mrs", "dr", "el", "la", "de", "le", "los", "las"
                        )

df <- df[!(df$words %in% stop_words), ]

# colors to fill the word cloud
# gradient
wordcloud_pal <- colorRampPalette(c("black", "gray60"))

# taking words with counts greater than 15
index <- which(df$count > 10)
my.counts <- (df$count[index])^(1/2)

par(mar=c(0,0,0,0), bg = "white")

wordcloud(df$words[index], my.counts, scale = c(2, .5), min.freq = 3
          , max.words = Inf, random.order = F
          , random.colors = F, ordered.colors = T
          , rot.per = 0, colors = wordcloud_pal(length(df$words[index])))
```

```
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## graphical parameter

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## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : making could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sword could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : where could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : cookbook could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : cross could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : extraordinary could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ghost could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : girls could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : prince could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : return could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sex could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : before could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : body could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dune could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : game could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : madness could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : reader could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : theory could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : work could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : adventure could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : again could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : classic could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : darkness could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : discworld could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dragonlance could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : everything could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : greek could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : inside could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : james could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : jesus could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : miss could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : odyssey could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : origins could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : paradise could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : stone could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : water could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : winter could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : york could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : angels could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : beatles could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : boy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : crime could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : demon could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : devil could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dick could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : easy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hitchhiker could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : midnight could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : peace could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : shannara could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : son could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sun could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ultimate could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : worlds could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ancient could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : blake could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : boys could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : business could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : case could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : classics could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : collection could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : every could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : gods could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hope could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : inspector could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : know could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lady could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : land could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : macbeth could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : maison could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : nature could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : over could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : perfect could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : poirot could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : quest could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : reflections could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : robert could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : second could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : soul could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : travels could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : anita could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : being could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : chronicle could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : cold could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dummies could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : glass could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hercule could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hidden could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : language could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : most could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : natural could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : only could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : park could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : philip could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : side could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : they could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wicked could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : austen could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : between could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bible could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : clancy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : contemporary could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : doctor could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : early could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : eden could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : goddess could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : heaven could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ikkoku could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : just could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : kingdom could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ladies could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : legacy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mark could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mirror could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mother could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : never could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : personal could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : peter could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : pitt could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : place could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : portrait could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : princess could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : rising could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : stars could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : trek could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : valdemar could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : xanth could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : betsy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : blues could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bride could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : changed could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : christian could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : critical could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : europe could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : evolution could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : forever could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : free could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : galaxy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : garden could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : gone could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hamlet could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hard could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : laura could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lover could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mary could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mysteries could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : nothing could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : plum could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : politics could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : revolution could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : shadows could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : strange could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : stranger could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : think could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : thomas could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : view could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : web could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : adams could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bad could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : confessions could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : conversations could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : design could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : east could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : edge could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : fantasy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : friends could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : future could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : golden could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : here could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : holmes could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hundred could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ingalls could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lincoln could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : memoirs could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mountain could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : myth could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : paris could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ranma could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : recipes could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : richard could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : series could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sister could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : street could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : thinking could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : tree could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wilder could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : william could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : witch could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : without could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wonderland could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : against could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : anne could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bleach could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bosch could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : change could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : cthulhu could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : democracy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : detective could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : double could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dragons could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dynasty could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : force could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : happiness could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : identity could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : memory could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : name could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : planet could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : republic could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sense could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sherlock could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : something could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : want could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : write could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : angel could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : atlas could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : augustine could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : awakening could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : birds could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : circle could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : crown could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : falls could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : gate could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : genius could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : greatest could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hand could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : handbook could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hour could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : inner could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : joe could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : letter could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lion could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : london could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : machine could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : made could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : masters could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : materials could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : meaning could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : oedipus could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : poetry could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : point could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : right could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : rome could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : room could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : scarlet could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : season could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : small could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : stephanie could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : strategy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : tower could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : treasure could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : trial could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : understanding could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : virginia could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : western could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : agency could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : alone could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ballet could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : classical could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : comedy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : desire could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : getting could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hot could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : iliad could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : invisible could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : japan could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : jones could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : journal could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : leadership could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : literature could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : make could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : management could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : myths could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : naked could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : next could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : practical could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : reading could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : set could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sleeping could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sparrow could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : stephen could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : tacy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : translation could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : underworld could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : vinci could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : voyage could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : walk could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : warrior could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wheel could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wrong could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : adam could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : amazing could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : annotated could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : apprentice could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : artemis could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : artist could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : away could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : beautiful could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : beloved could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : birth could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : coming could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : criticism could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : diaries could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dracula could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dying could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : eternal could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : euripides could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : everyday could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : flying could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : fowl could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : frankenstein could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : freedom could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : french could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : geisha could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : journals could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : joy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : judy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : justice could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : kay could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : kitchen could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lake could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : look could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mythology could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : nightmare could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : nights could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : north could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : official could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : origin could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : outlander could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : papers could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : physics could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : picture could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : play could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : portable could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : pride could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : psychology could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : punishment could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : reason could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : revolutionary could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : rpg could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : saint could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : salem could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : scarpetta could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : shoes could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : shopaholic could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : sky could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : swords could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : tell could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : thief could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : thing could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : tragedy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : whole could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : wolf could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : woolf could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : writer could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : amber could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ana could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : anna could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bite could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bizarre could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : bones could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : broken could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : changeling could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : chocolate could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : church could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : class could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : classroom could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : color could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : common could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : cook could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : dictionary could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : discovery could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : drifting could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ender could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : english could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : epic could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : ethics could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : exile could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : fables could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : face could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : finn could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : food could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : gospel could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : gray could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : grey could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : half could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hall could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : happy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : heat could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : hemingway could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : horror could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : india could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : intelligence could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : italy could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : jojo could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : knows could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : lessons could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in text.default(x1, y1, words[i], cex = size[i], offset = 0, srt =
## rotWord * : "random.colors" is not a graphical parameter

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mage could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : magician could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : mars could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : michael could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : moby could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : moody could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : movie could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : much could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : nicas could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : omnibus could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : passion could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : philosophical could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : plato could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : prophet could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : prose could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : rabbit could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : religion could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : remember could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : silent could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : social could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : soldier could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : species could not be fit on page. It will not be plotted.
```

```
## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : spider could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : spiritual could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : step could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : terror could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : thoughts could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : twelve could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : twenty could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : visual could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : walking could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : witches could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : youth could not be fit on page. It will not be plotted.

## Warning in strwidth(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter
```

```
## Warning in strheight(words[i], cex = size[i], ...): "random.colors" is not a
## graphical parameter

## Warning in wordcloud(df$words[index], my.counts, scale = c(2, 0.5), min.freq =
## 3, : zero could not be fit on page. It will not be plotted.
```

```r
#########################
# Multi dimension plot 4
# Scatterplot
# Number of reviews
# Number of ratings
# Average rating

par(mar = c(7,5,4,4))
# bad to good
mycolvec <- colorRampPalette(c("red", "blue"))

books_df_trimmed <- books_df[books_df$text_reviews_count < 75000,] # removes 2 datapoints
books_df_trimmed <- books_df_trimmed[books_df_trimmed$text_reviews_count > 0,] # not interesting

num_breaks=10
books_df_trimmed$Col <- mycolvec(num_breaks)[as.numeric(cut(books_df_trimmed$average_rating,breaks = num
levels(cut(books_df_trimmed$average_rating,breaks = num_breaks))
```
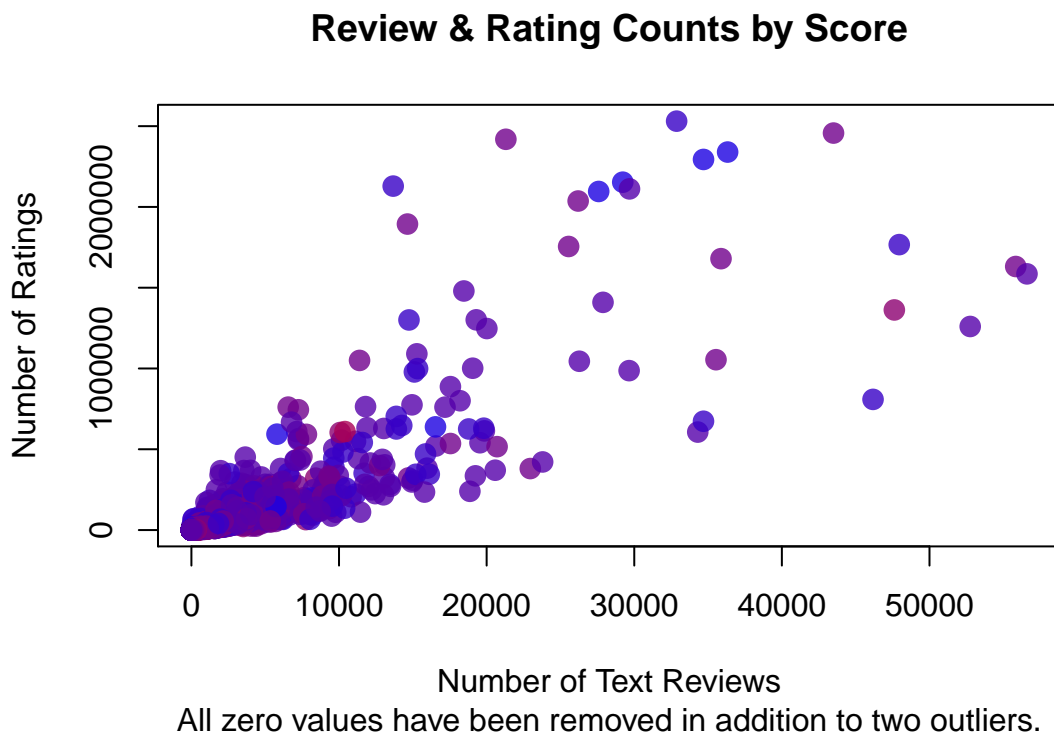
```
## [1] "(2.4,2.65]"  "(2.65,2.9]"  "(2.9,3.15]"  "(3.15,3.4]"  "(3.4,3.65]"
## [6] "(3.65,3.91]" "(3.91,4.16]" "(4.16,4.41]" "(4.41,4.66]" "(4.66,4.91]"
```

```r
table(books_df_trimmed$Col)
```

```
##
## #0000FF #1C00E2 #3800C6 #5500AA #71008D #8D0071 #AA0055 #C60038 #E2001C #FF0000
##      14     335    1722    3385    2674     974     245      47      17       4
```

```r
plot(books_df_trimmed$text_reviews_count, books_df_trimmed$ratings_count
     , col = alpha(books_df_trimmed$Col, .8)
     , pch = 16
     , cex = 1.5
     , main = "Review & Rating Counts by Score"
     , xlab = "Number of Text Reviews"
     , ylab = "Number of Ratings"
     , sub = "All zero values have been removed in addition to two outliers.")
```


Review & Rating Counts by Score

Number of Text Reviews

All zero values have been removed in addition to two outliers.

```r
pop_books <- books_df_trimmed[books_df_trimmed$text_reviews_count > 10000,]
pop_books <- books_df_trimmed[books_df_trimmed$ratings_count > 500000,]

pop_books$numtotext <- pop_books$ratings_count/pop_books$text_reviews_count

pop_books <- pop_books[, c(2,3,4,9,10,17)]
```