Sentiment Analysis

Analysis performed using Syuzhet Packages
(www.rdocumentation.org/packages/syuzhet/versions/1.0.6)

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Contents

Inspect the Syuzhet dictionary

(http://saifmohammad.com/WebPages/lexicons.html)

```
head(get_sentiment_dictionary(dictionary = "nrc", language = "italian"),15)
```

```
##       lang         word sentiment value
## 1  italian         abba  positive     1
## 2  italian     capacità  positive     1
## 3  italian sopra citato  positive     1
## 4  italian     assoluto  positive     1
```

```
## 5  italian  assoluzione  positive     1
## 6  italian    assorbito  positive     1
## 7  italian   abbondanza  positive     1
## 8  italian   abbondante  positive     1
## 9  italian   accademico  positive     1
## 10 italian    accademia  positive     1
## 11 italian  accettabile  positive     1
## 12 italian accettazione  positive     1
## 13 italian  accessibile  positive     1
## 14 italian      encomio  positive     1
## 15 italian     alloggio  positive     1
```

Define function to make the text extracted from dataframe suitable for analysis

```
# Define function to make the text suitable for analysis
clean.text = function(x)
{
  # tolower
  x = tolower(x)
  # remove rt
  x = gsub("rt", "", x)
  # remove at
  x = gsub("@\\w+", "", x)
  # remove punctuation
  x = gsub("[[:punct:]]", "", x)
  # remove numbers
  x = gsub("[[:digit:]]", "", x)
  # remove links http
  x = gsub("http\\w+", "", x)
  # remove tabs
  x = gsub("[ |\t]{2,}", "", x)
  # remove blank spaces at the beginning
  x = gsub("^ ", "", x)
  # remove blank spaces at the end
  x = gsub(" $", "", x)
  return(x)
}
```

First create the filtered dataframes

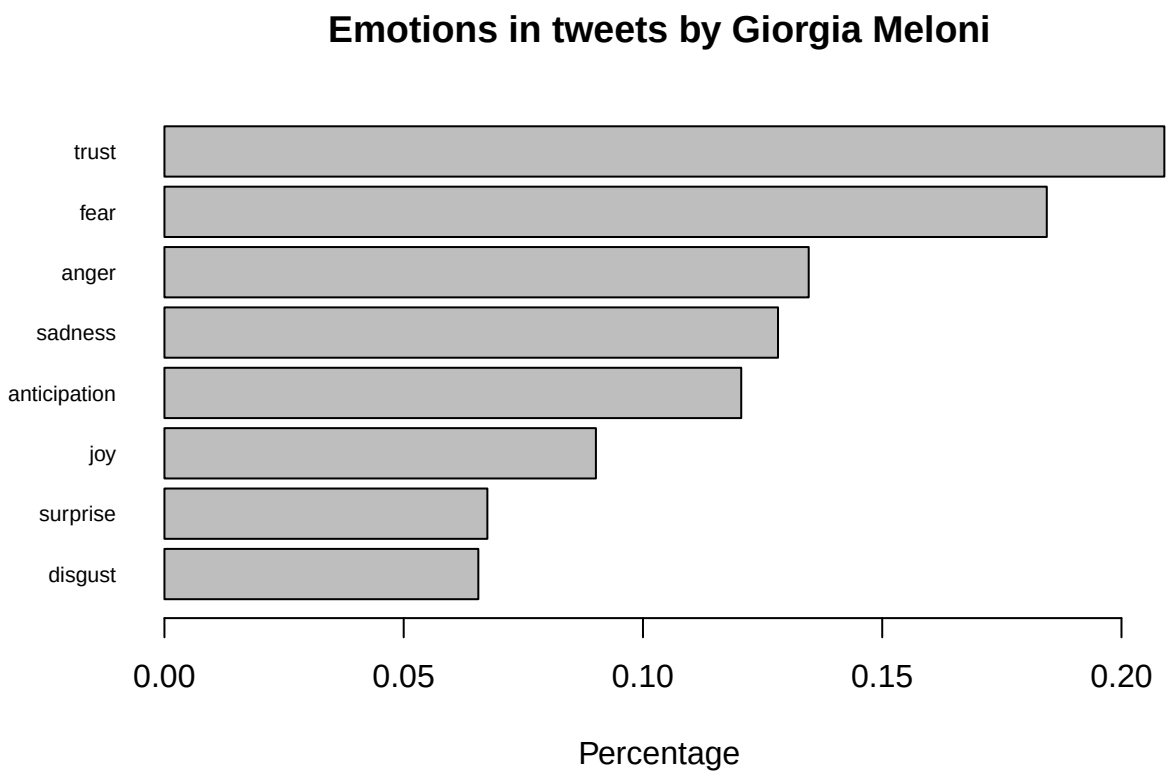
```
# Create filtered dataframes
MELONI <- dataset %>% filter(nome  %like% "MELONI")
CONTE <- dataset %>% filter(nome  %like% "CONTE")
RENZI <- dataset %>% filter(nome  %like% "RENZI")
SALVINI <- dataset %>% filter(nome  %like% "SALVINI")
LETTA <- dataset %>% filter(nome  %like% "LETTA")
BERLUSCONI <- dataset %>% filter(nome  %like% "BERLUSCONI")
SPERANZA <- dataset %>% filter(nome  %like% "SPERANZA")
```

Then create nrc objects

```
# Create the nrc object
nrc_meloni <- get_nrc_sentiment(MELONI$tweet_testo, language="italian")
save(nrc_meloni,file="data/nrc_meloni.Rda")

nrc_conte <- get_nrc_sentiment(CONTE$tweet_testo, language="italian")
save(nrc_conte,file="data/nrc_conte.Rda")

nrc_renzi <- get_nrc_sentiment(RENZI$tweet_testo, language="italian")
save(nrc_renzi,file="data/nrc_renzi.Rda")

nrc_salvini <- get_nrc_sentiment(SALVINI$tweet_testo, language="italian")
save(nrc_salvini,file="data/nrc_salvini.Rda")

# NO DATA FOR LETTA
nrc_letta <- get_nrc_sentiment(LETTA$tweet_testo, language="italian")
save(nrc_letta,file="data/nrc_letta.Rda")

nrc_berlusconi <- get_nrc_sentiment(BERLUSCONI$tweet_testo, language="italian")
save(nrc_berlusconi, file="data/nrc_berlusconi.Rda")

nrc_speranza <- get_nrc_sentiment(SPERANZA$tweet_testo, language="italian")
save(nrc_speranza,file="data/nrc_speranza.Rda")
```

1) Giorgia Meloni - TRUST - GOVERNO

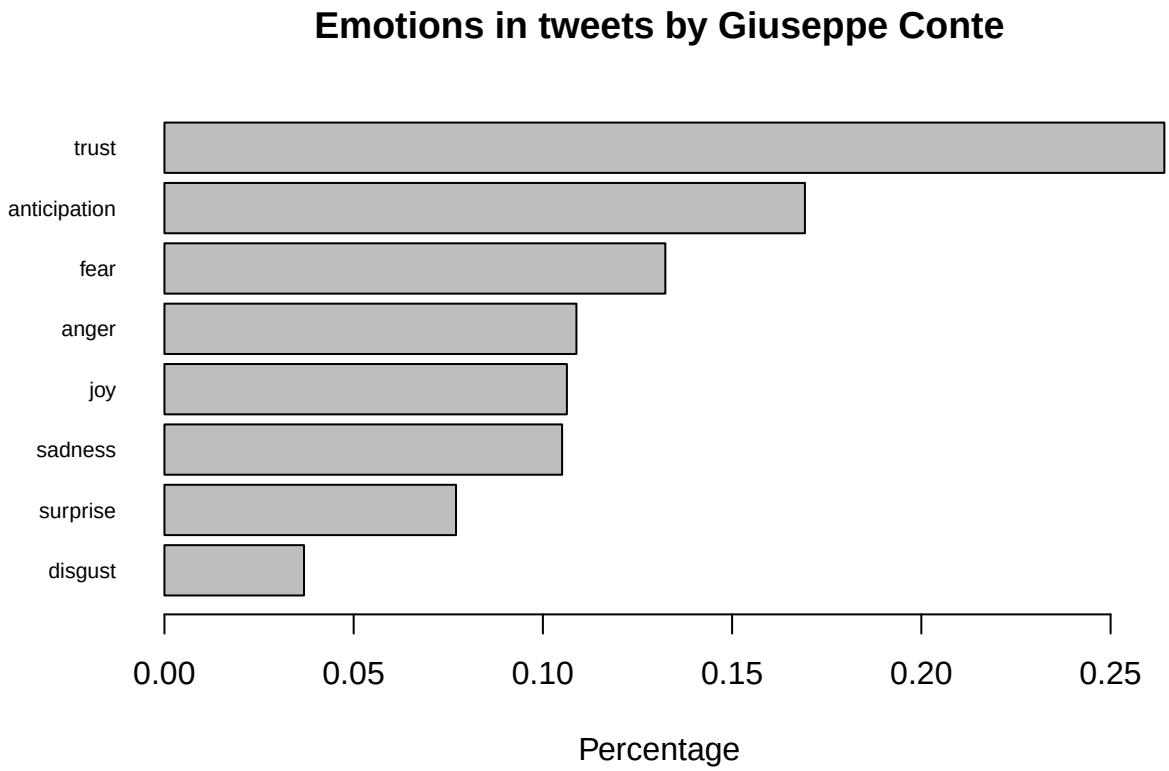
Plot the percentage of the emotion



Plot the wordcloud of emotions

Emotion Comparison Word Cloud for tweets by Giorgia Meloni

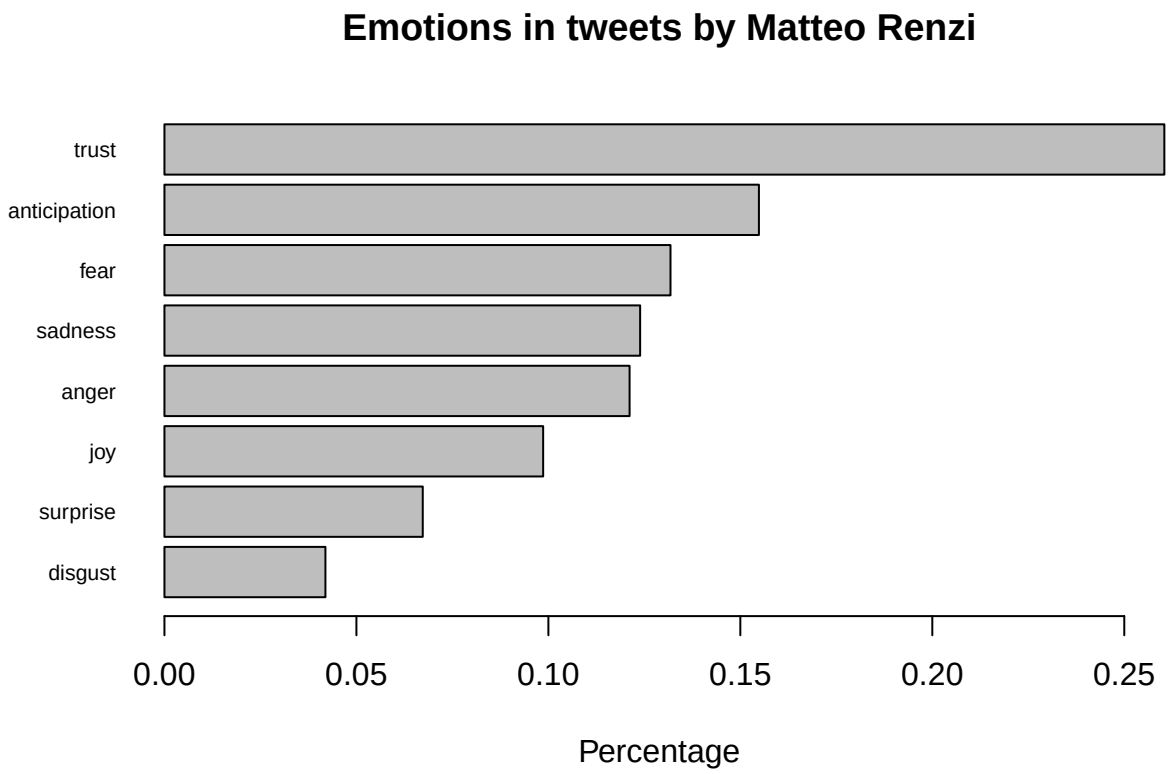
2) Conte - TRUST - LAVORO



Emotion Comparison Word Cloud for tweets by Giuseppe Conte

3) Renzi - TRUST - LAVORO

Plot the percentage of the emotion

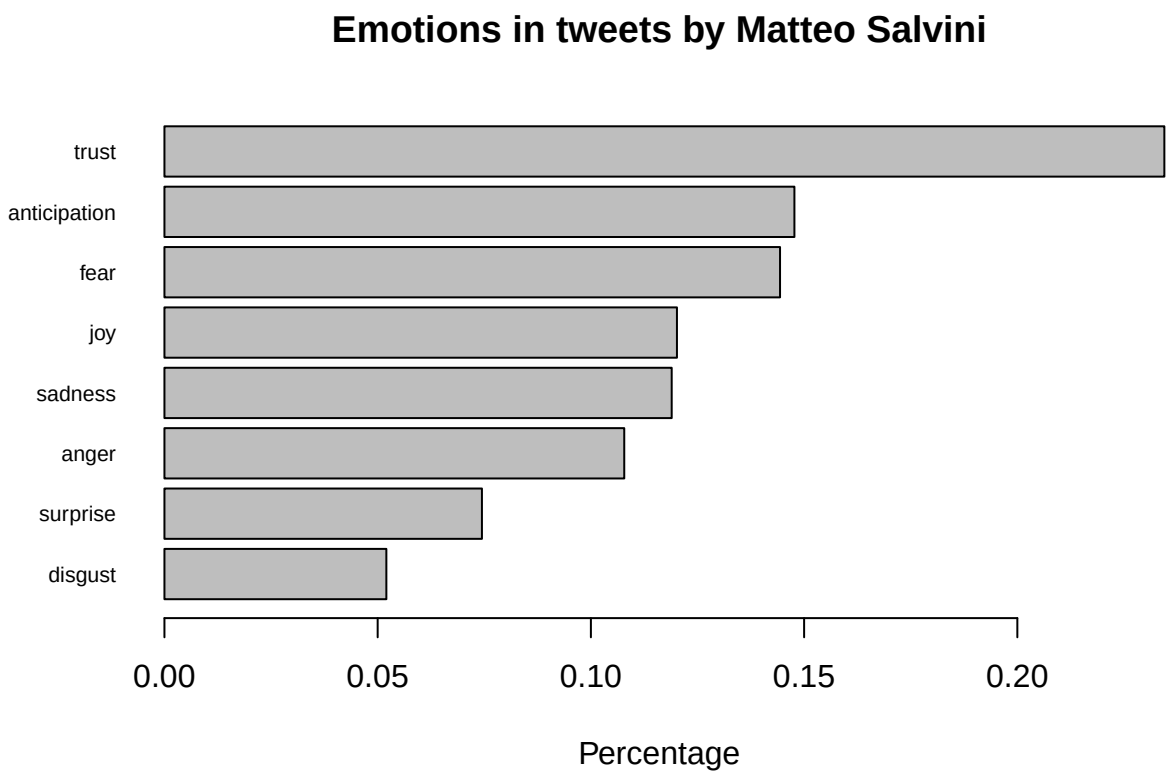


Plot the wordcloud of emotions

Emotion Comparison Word Cloud for tweets by Matteo Renzi

4) Salvini - TRUST - LAVORO

Plot the percentage of the emotion



Plot the wordcloud of emotions

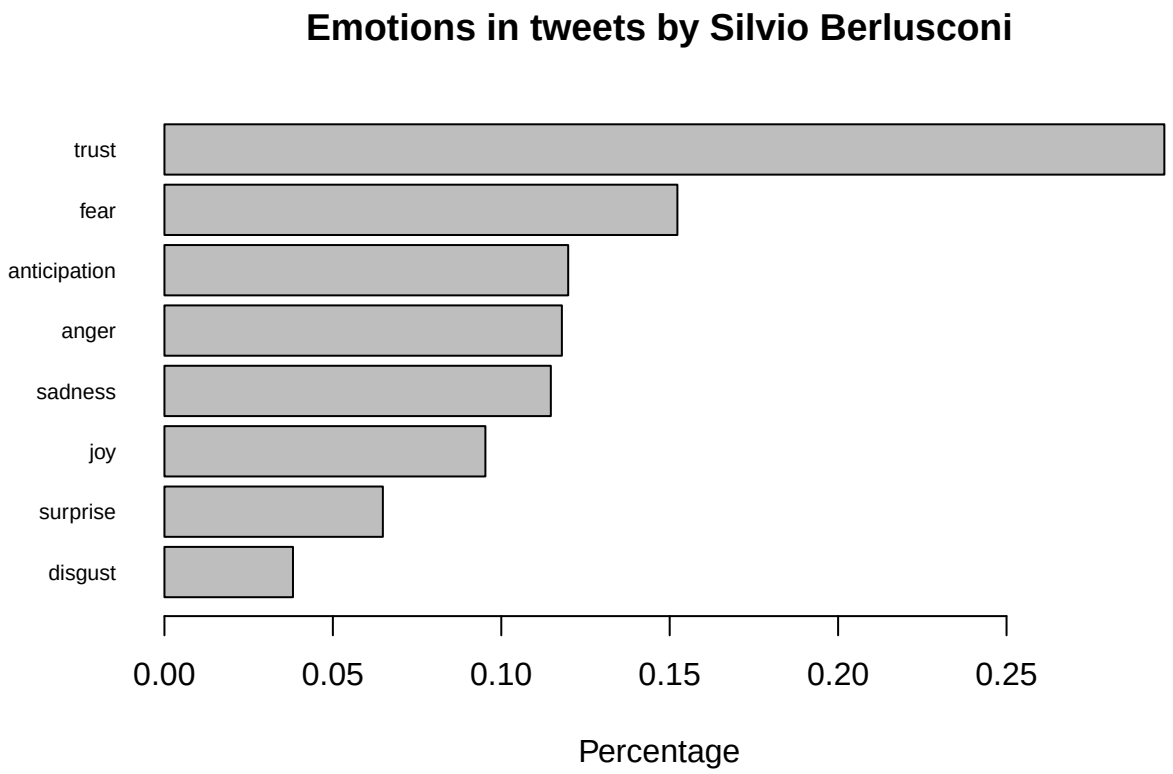
Emotion Comparison Word Cloud for tweets by Matteo Salvini

5) Letta

NO DATA FOR LETTA

6) Berlusconi - TRUST - GOVERNO

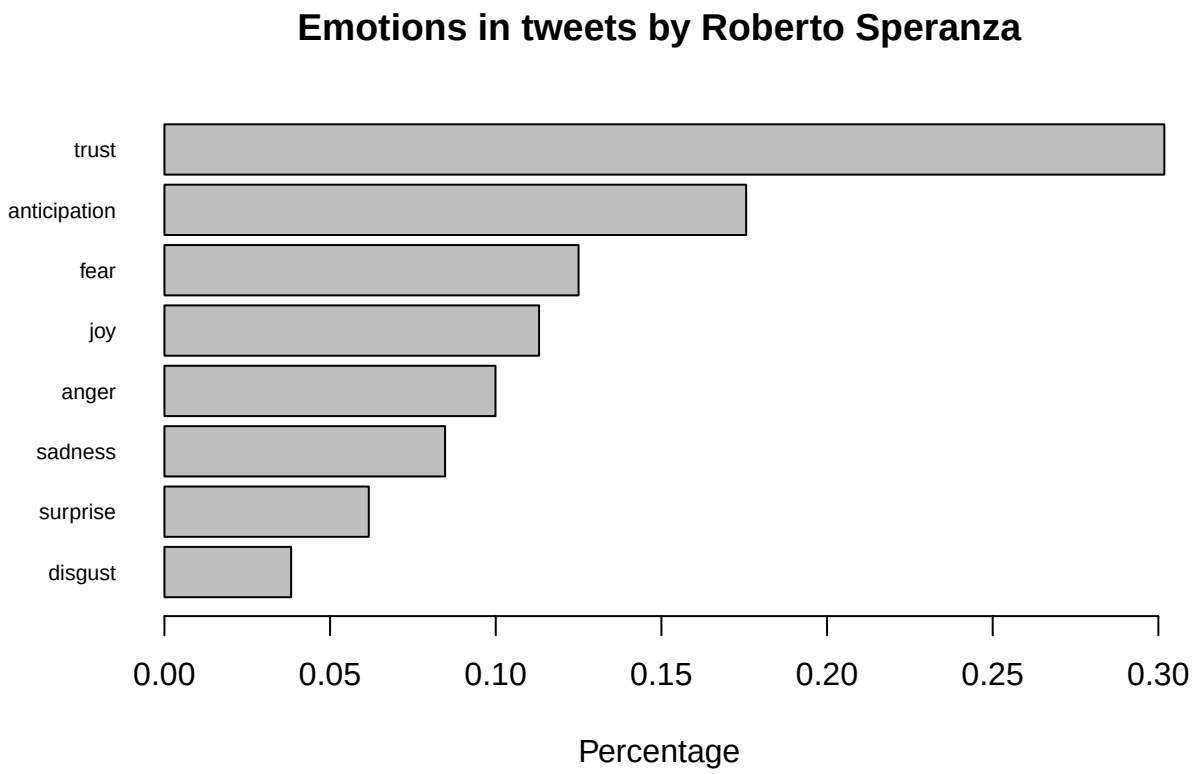
Plot the percentage of the emotion



Plot the wordcloud of emotions

7) Speranza - TRUST - LAVORO

Plot the percentage of the emotion



Plot the wordcloud of emotions

Emotion Comparison Word Cloud for tweets by Roberto Speranza