# iemisctext: Example Analysis using the tm package

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### **Examples**

#### Example 1

```
install.load::load_package("iemisctext", "tm")
# load needed packages using the load_package function from the install.load
# package (it is assumed that you have already installed these packages)

# appeal_womanhood_world
data(appeal_womanhood_world)

# create a document term matrix of appeal_womanhood_world
a <- DocumentTermMatrix(appeal_womanhood_world)

# find terms used > 5 times
findFreqTerms(a, 5)

## [1] "and" "great" "have" "not" "that" "the" "with" "women"
# Zipf's law
Zipf_plot(a)
```

```
3.0
log(frequency)
      2.0
      0.1
      0.0
             0
                                                                                  5
                                         2
                                                       3
                           1
                                                                    4
                                              log(rank)
## (Intercept)
     2.1639648
                 -0.4452613
# anarchy
data(anarchy)
# create a document term matrix of anarchy
a <- DocumentTermMatrix(anarchy)</pre>
# find terms used > 5 times
findFreqTerms(a, 5)
    [1] "`'tis"
                               "`let"
##
                    "`and"
                                          "`thou"
                                                     "all"
                                                                "and"
                                                                           "are"
                    "blood"
                               "but"
                                                     "england"
##
    [8] "art"
                                          "earth"
                                                                           "every"
                                                                "english"
## [15] "for"
                    "from"
                               "had"
                                          "have"
                                                     "her"
                                                                "his"
                                                                           "its"
                    "like"
                                                     "one"
                                                                           "own"
## [22] "let"
                               "make"
                                          "not"
                                                                "over"
## [29] "such"
                    "that"
                               "the"
                                          "their"
                                                     "them"
                                                                "they"
                                                                           "those"
                               "thy"
## [36] "thou"
                    "through"
                                          "upon"
                                                     "was"
                                                                "when"
                                                                           "where"
## [43] "which"
                    "who"
                               "will"
                                          "with"
                                                     "your"
```

# Zipf's law
Zipf\_plot(a)

```
log(frequency)
     က
     \alpha
      0
             0
                        1
                                   2
                                             3
                                                                  5
                                                                             6
                                                                                        7
                                                        4
                                              log(rank)
## (Intercept)
     3.4810675 -0.5440241
# war_prayer
data(war_prayer)
# create a document term matrix of war_prayer
wp <- DocumentTermMatrix(war_prayer)</pre>
# find terms used > 5 times
findFreqTerms(wp, 5)
## [1] "and"
                  "for"
                                      "god"
                                                          "help"
                            "from"
                                                "have"
                                                                    "his"
                                                                              "our"
```

"their"

"you"

"them"

"your"

"upon"

"war"

"was"

"the"

"with"

## [9] "prayed" "that"

"who"

## [17] "which"

# Zipf's law
Zipf\_plot(wp)

```
(Kouneuck) (Kouneuck)
```

## (Intercept) x ## 2.824209 -0.478659

# war\_racket
data(war\_racket)

# create a document term matrix of war\_racket

wr <- DocumentTermMatrix(war\_racket)</pre>

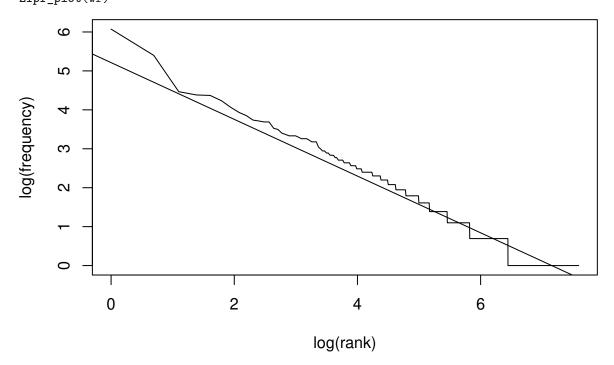
# find terms used > 5 times

findFreqTerms(wr, 5)

##	[1]	"about"	"all"	"american"	"and"
##	[5]	"another"	"any"	"are"	"arms"
##	[9]	"average"	"back"	"bankers"	"been"
##	[13]	"before"	"being"	"bonds"	"bought"
##	[17]	"boys"	"business"	"but"	"called"
##	[21]	"came"	"can"	"can't"	"cannot"
##	[25]	"capital"	"cent"	"cent."	"chapter"
##	[29]	"cost"	"could"	"did"	"does"
##	[33]	"dollars"	"don't"	"during"	"each"
##	[37]	"earnings"	"eighteen"	"end"	"even"
##	[41]	"every"	"few"	"for"	"france"
##	[45]	"from"	"general"	"germany"	"get"
##	[49]	"got"	"government"	"great"	"had"
##	[53]	"has"	"have"	"his"	"home"
##	[57]	"how"	"huge"	"hundred"	"increase"
##	[61]	"industry"	"international"	"into"	"it,"
##	[65]	"it."	"its"	"just"	"kill"
##	[69]	"less"	"let"	"let's"	"liberty"
##	[73]	"like"	"limit"	"little"	"lot"
##	[77]	"made"	"make"	"manufacturers"	"many"
##	[81]	"men"	"might"	"more"	"mosquito"

```
[85] "munitions"
                           "must"
                                             "nation"
                                                              "never"
##
    [89] "no."
                           "normal"
                                             "not."
                                                              "now"
##
                           "one"
    [93] "off"
                                             "only"
                                                              "other"
##
    [97] "our"
                           "out"
                                             "over"
                                                              "own"
##
   [101] "paid"
                           "part"
                                             "pay"
                                                              "pays"
##
  [105] "people"
                           "per"
                                             "period"
                                                              "profit"
##
  [109] "profits"
                           "profits."
                                             "put"
                                                              "racket"
         "sam"
                           "same"
                                             "ships"
                                                              "should"
## [113]
   Γ117]
         "smash"
                           "sold"
                                             "soldier"
                                                              "soldiers"
   [121] "some"
##
                           "states"
                                             "steel"
                                                              "still"
  [125] "take"
                           "than"
                                             "that"
                                                              "the"
  [129] "their"
                           "them"
                                             "then"
                                                              "there"
##
   [133] "these"
                           "they"
                                             "this"
                                                              "those"
##
## [137] "thousands"
                           "three"
                                             "time"
                                                              "told"
## [141] "too"
                           "too."
                                             "total"
                                                              "two"
                           "united"
                                             "until"
                                                              "upon"
## [145] "uncle"
##
  [149] "use"
                           "very"
                                             "war"
                                                              "war,"
## [153] "war."
                           "was"
                                             "well"
                                                              "well,"
                           "were"
                                             "what"
                                                              "when"
## [157] "went"
## [161] "where"
                           "whether"
                                             "who"
                                                              "will"
                                             "world"
## [165] "with"
                           "without"
                                                              "would"
## [169] "year"
                           "year."
                                             "yearly"
                                                              "years"
## [173] "yes,"
                           "you"
                                             "your"
```

# Zipf's law
Zipf\_plot(wr)



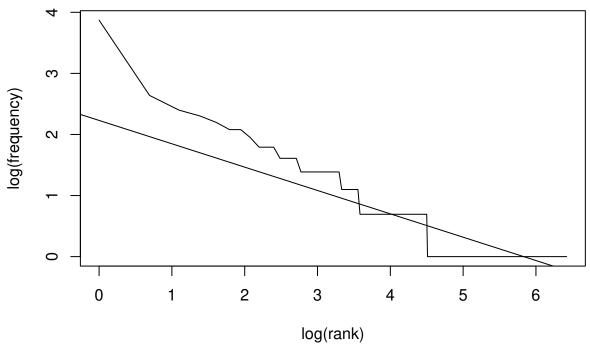
## (Intercept) x ## 5.212469 -0.728547 # connect\_dots

data(connect\_dots)

# create a document term matrix of connect\_dots

```
cd <- DocumentTermMatrix(connect_dots)</pre>
# find terms used > 5 times
findFreqTerms(cd, 5)
## [1] "and"
                                  "has"
                                               "have"
                                                            "must"
                                                                         "our"
                    "for"
## [7] "petroleum" "that"
                                  "the"
# Zipf's law
Zipf_plot(cd)
     က
log(frequency)
     \alpha
      0
             0
                                      2
                                                  3
                                                                          5
                         1
                                                                                       6
                                                              4
                                             log(rank)
## (Intercept)
     2.5493059
                 -0.4666954
# us_them
data(us_them)
# create a document term matrix of us_them
ut <- DocumentTermMatrix(us_them)</pre>
# find terms used > 5 times
findFreqTerms(ut, 5)
   [1] "all"
                   "and"
                              "for"
                                         "freedom" "gave"
                                                               "know"
                                                                          "not"
## [8] "our"
                   "tha"
                              "the"
                                         "their"
                                                    "them"
                                                               "they"
                                                                          "will"
## [15] "won't"
# Zipf's law
Zipf_plot(ut)
```

```
3.0
      2.5
log(frequency)
      2.0
      1.0 1.5
      0.5
      0.0
               0
                                                                                       5
                             1
                                            2
                                                          3
                                                                         4
                                                   log(rank)
## (Intercept)
      2.9193372 -0.5665568
# climate_strange
data(climate_strange)
```



```
## (Intercept) x
## 2.2297149 -0.3823361
```

## Example 2

```
install.load::load_package("iemisctext", "tm")
# load needed packages using the load_package function from the install.load package (it is assumed that
# appeal_womanhood_world
data(appeal_womanhood_world)

# View text representation of appeal_womanhood_world
inspect(appeal_womanhood_world[[i]])

# anarchy
data(anarchy)

# View text representation of anarchy
inspect(anarchy[[i]])

# war_prayer
data(war_prayer)
```

```
# View text representation of war_prayer
inspect(war_prayer[[1]])
# war_racket
# Example 2
data(war_racket)
# View text representation of war_racket
inspect(war_racket[[1]])
# connect_dots
data(connect_dots)
# View text representation of connect_dots
inspect(connect_dots[[1]])
# us_them
data(us_them)
# View text representation of us_them
inspect(us_them[[1]])
# climate_strange
data(climate_strange)
# View text representation of climate_strange
inspect(climate_strange[[1]])
```

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