

# Dictionary Analysis II

analysis at politicians level

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```
# import dictionaries file
dict <- read_excel("data/populism_dictionaries.xlsx")
variable.names(dict)
```

```
## [1] "Rooduijn_Pauwels_Italian"
## [2] "Grundl_Italian_adapted"
## [3] "Decadri_Boussalis"
## [4] "Decadri_Boussalis_Grundl_People"
## [5] "Decadri_Boussalis_Grundl_Common Will"
## [6] "Decadri_Boussalis_Grundl_Elite"
```

```
# create the dictionary
Rooduijn_Pauwels_Italian <-
  dictionary(list(populism =
    (dict$Rooduijn_Pauwels_Italian
     [!is.na(dict$Rooduijn_Pauwels_Italian)])))

Grundl_Italian_adapted <-
  dictionary(list(populism =
    dict$Grundl_Italian_adapted
    [!is.na(dict$Grundl_Italian_adapted)]))

Decadri_Boussalis <-
  dictionary(list(populism =
    dict$Decadri_Boussalis
    [!is.na(dict$Decadri_Boussalis)]))

Decadri_Boussalis_Grundl <-
  dictionary(list(people =
    dict$Decadri_Boussalis_Grundl_People
```

```

[!is.na(dict$Decadri_Boussalis_Grundl_People)],
common_will =
  dict$`Decadri_Boussalis_Grundl_Common Will`
[!is.na(dict$`Decadri_Boussalis_Grundl_Common Will`)],
elite =
  dict$Decadri_Boussalis_Grundl_Elite
[!is.na(dict$Decadri_Boussalis_Grundl_Elite))])

```

```

dictionaries <- c("Rooduijn_Pauwels_Italian", "Grundl_Italian_adapted",
                  "Decadri_Boussalis", "Decadri_Boussalis_Grundl")
n.words <- c(length(Rooduijn_Pauwels_Italian$populism),
             length(Grundl_Italian_adapted$populism),
             length(Decadri_Boussalis$populism),
             (length(Decadri_Boussalis_Grundl$people)+
              length(Decadri_Boussalis_Grundl$common_will)+
              length(Decadri_Boussalis_Grundl$elite))
            )
number_of_words <- data.frame(dictionaries,n.words)
kable(number_of_words)

```

dictionaries	n.words
Rooduijn_Pauwels_Italian	18
Grundl_Italian_adapted	135
Decadri_Boussalis	25
Decadri_Boussalis_Grundl	77

## Group and weight the dfm

```

# By politician & month
dfm_weigh_name_month <- dfm_group(DFM, groups = interaction(nome, month)) %>% dfm_weight(scheme = "prop")
# By pol & quarter
dfm_weigh_name_quart <- dfm_group(DFM, groups = interaction(nome, quarter)) %>% dfm_weight(scheme = "prop")
# By pol & year
dfm_weigh_name_year <- dfm_group(DFM, groups = interaction(nome, year)) %>% dfm_weight(scheme = "prop")
# By pol & day
dfm_weigh_name_day <- dfm_group(DFM, groups = interaction(nome, date)) %>% dfm_weight(scheme = "prop")

```

## Rooduijn\_Pauwels\_Italian

```
# Dictionary analysis with Rooduijn_Pauwels_Italian
# By quarter
dfm_dict2_name <- dfm_lookup(dfm_weigh_name_quart, dictionary = Rooduijn_Pauwels_Italian)
# Group by date
dfm_by_date2_name <- dfm_lookup(dfm_weigh_name_day, dictionary = Rooduijn_Pauwels_Italian)
```

### Most populist politician

```
dict2_tstat_nome <- textstat_frequency(dfm_dict2_name, groups = nome)

kable(dict2_tstat_nome %>% slice_max(frequency, n = 20))
```

	feature	frequency	rank	docfreq	group
101	populism	0.1428571	1	1	CASSESE Gianpaolo
246	populism	0.1250000	1	1	GOLINELLI Guglielmo
263	populism	0.1158753	1	7	IOVINO Luigi
331	populism	0.1111111	1	1	MINARDO Antonino
129	populism	0.0950299	1	6	CROATTI Marco
471	populism	0.0946934	1	7	SERRITELLA Davide
167	populism	0.0909091	1	1	DI LAURO Carmen
131	populism	0.0871635	1	4	CURRO' Giovanni
31	populism	0.0860499	1	3	BARTOLOZZI Giusi
63	populism	0.0840516	1	8	BORDO Michele
510	populism	0.0838911	1	2	TRIZZINO Giorgio
517	populism	0.0797414	1	2	VALENTE Simone
100	populism	0.0744262	1	3	CASINI Pier Ferdinando
181	populism	0.0704082	1	2	FANTUZ Marica
171	populism	0.0689550	1	5	DI STASIO Iolanda
341	populism	0.0655501	1	9	MORANI Alessia
325	populism	0.0651316	1	2	MELICCHIO Alessandro
209	populism	0.0643939	1	2	FORMENTINI Paolo
132	populism	0.0639111	1	3	D'ALESSANDRO Camillo
288	populism	0.0638397	1	3	LORENZONI Eva

### Distribution of politician populism

```
summary(dict2_tstat_nome$frequency)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0005136 0.0065805 0.0132774 0.0191253 0.0253530 0.1428571
```

```
#TBD
```

```
# above the median
dict2_tstat_nome %>% filter(frequency > median(frequency)) %>% count()
```

```
##      n
## 1 272
```

```
# above the mean
```

```
dict2_tstat_nome %>% filter(frequency > mean(frequency)) %>% count()
```

```
##      n
## 1 197
```

```
# below the first quantiles
```

```
dict2_tstat_nome %>% filter(frequency < 0.18584 ) %>% count()
```

```
##      n
## 1 544
```

```
# above the third quantiles
```

```
dict2_tstat_nome %>% filter(frequency > 1.48826 ) %>% count()
```

```
##      n
## 1 0
```

## Grundl\_Italian\_adapted

```
# Dictionary analysis with Grundl_Italian_adapted
# By quarter
dfm_dict3_name <- dfm_lookup(dfm_weigh_name_quart, dictionary = Grundl_Italian_adapted)
# Group by date
dfm_by_date3_name <- dfm_lookup(dfm_weigh_name_day, dictionary = Grundl_Italian_adapted)
#dfm_by_date2
```

## Most populist politician

```
dict_3_tstat_nome <- textstat_frequency(dfm_dict3_name, groups = nome)
kable(dict_3_tstat_nome %>% slice_max(frequency, n = 20))
```

	feature	frequency	rank	docfreq	group
86	populism	0.1904762	1	2	BUCCARELLA Maurizio
187	populism	0.1250000	1	1	DONNO Daniela
66	populism	0.1071488	1	4	BONAFEDE Alfonso
516	populism	0.1002768	1	2	TABACCI Bruno
288	populism	0.0954451	1	3	LANZI Gabriele
157	populism	0.0885103	1	6	DE FALCO Gregorio
278	populism	0.0836591	1	7	IOVINO Luigi
22	populism	0.0833333	1	1	BADOLE Mirco
397	populism	0.0833333	1	1	PARRINI Dario
282	populism	0.0740260	1	2	LA MURA Virginia
266	populism	0.0722608	1	7	GRASSO Pietro
470	populism	0.0711732	1	8	RUGGIERO Francesca Anna
343	populism	0.0708267	1	7	MICELI Carmelo
199	populism	0.0704082	1	2	FANTUZ Marica
292	populism	0.0652898	1	2	LEPRI Stefano
41	populism	0.0642896	1	3	BENEDETTI Silvia
340	populism	0.0625313	1	3	MELICCHIO Alessandro
444	populism	0.0625000	1	1	RIPAMONTI Paolo
487	populism	0.0625000	1	1	SCANU Lucia
314	populism	0.0597851	1	8	MAGI Riccardo

## Distribution of politician populism

```
# TBD
summary(dict_3_tstat_nome$frequency)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0006297 0.0093804 0.0157025 0.0209629 0.0277554 0.1904762
```

```
# above the median
dict_3_tstat_nome %>% filter(frequency > median(frequency)) %>% count()
```

```
##      n
## 1 289
```

```
# above the mean
```

```
dict_3_tstat_nome %>% filter(frequency > mean(frequency)) %>% count()
```

```
##      n
## 1 217
```

```
# below the first quantiles
```

```
dict_3_tstat_nome %>% filter(frequency < 0.23802) %>% count()
```

```
##      n
## 1 578
```

```
# above the third quantiles
```

```
dict_3_tstat_nome %>% filter(frequency > 1.56229 ) %>% count()
```

```
##      n
## 1 0
```

## Decadri\_Boussalis

```
# Dictionary analysis with Decadri_Boussalis
```

```
# By quarter
```

```
dfm_dict4_name <- dfm_lookup(dfm_weigh_name_quart, dictionary = Decadri_Boussalis)
```

```
# By date
```

```
dfm_by_date4_name <- dfm_lookup(dfm_weigh_name_day, dictionary = Decadri_Boussalis)
```

## Most populist politician

```
dict_4_tstat_nome <- textstat_frequency(dfm_dict4_name, groups = nome)
```

```
kable(dict_4_tstat_nome %>% slice_max(frequency, n = 20))
```

	feature	frequency	rank	docfreq	group
176	populism	1.1394065	1	5	DE CARLO Luca
119	populism	0.2142857	1	2	CASSESE Gianpaolo
320	populism	0.2141298	1	9	IOVINO Luigi
73	populism	0.2000000	1	1	BONIARDI Fabio Massimo
538	populism	0.1963398	1	7	SAITTA Eugenio
160	populism	0.1932149	1	9	CROATTI Marco
533	populism	0.1822149	1	9	RUGGIERO Francesca Anna
162	populism	0.1801866	1	6	CURRO' Giovanni
559	populism	0.1787099	1	8	SERRITELLA Davide
489	populism	0.1752317	1	6	PUGLIA Sergio
252	populism	0.1745029	1	5	FORMENTINI Paolo
145	populism	0.1666667	1	1	COLLINA Stefano
314	populism	0.1666667	1	1	GUIDOLIN Barbara
244	populism	0.1652073	1	4	FITZGERALD NISSOLI Fucsia
177	populism	0.1609731	1	9	DE CARLO Sabrina
446	populism	0.1563921	1	5	PANIZZUT Massimiliano
211	populism	0.1563482	1	3	DONNO Daniela
208	populism	0.1523517	1	7	DI STASIO Iolanda
133	populism	0.1486012	1	3	CHIAZZESE Giuseppe
626	populism	0.1436083	1	5	VIANELLO Giovanni

## Distribution of politician populism

*#TBD*

```
summary(dict_4_tstat_nome$frequency)
```

```
##      Min.   1st Qu.   Median     Mean  3rd Qu.     Max.
## 0.002024 0.032759 0.051280 0.059200 0.075851 1.139406
```

*# above the median*

```
dict_4_tstat_nome %>% filter(frequency > median(frequency)) %>% count()
```

```
##      n
## 1 326
```

*# above the mean*

```
dict_4_tstat_nome %>% filter(frequency > mean(frequency)) %>% count()
```

```
##      n
## 1 259
```

*# below the first quantiles*

```
dict_4_tstat_nome %>% filter(frequency < 0.51949) %>% count()
```

```
##      n
## 1 651
```

```
# above the third quantiles
dict_4_tstat_nome %>% filter(frequency > 4.29796 ) %>% count()
```

```
##      n
## 1 0
```

Compare how the dictionaries score for the most populist politician

**\*\* DA AGGIUSTARE!!!\*\***