

# Dictionary Analysis

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## Contents

### **RICORSO ALLA RETORICA POPULISTA.**

**A livello di partiti politici, quali fanno maggiormente ricorso alla retorica populista?**

**A livello di singoli politici, quali fanno maggiormente ricorso alla retorica populista?**

Per rispondere a questa domanda, ricorrere ai seguenti dizionari 3(+1) dizionari:

- Rooduijn & Pauwels: Rooduijn, M., and T. Pauwels. 2011. "Measuring Populism: Comparing Two Methods of Content Analysis." *West European Politics* 34 (6): 1272–1283.
- Decadri & Boussalis: Decadri, S., & Boussalis, C. (2020). Populism, party membership, and language complexity in the Italian chamber of deputies. *Journal of Elections, Public Opinion and Parties*, 30(4), 484-503.
- Grundl: Gründl J. Populist ideas on social media: A dictionary-based measurement of populist communication. *New Media & Society*. December 2020.
- Decadri & Boussalis + Grundl: questo è semplicemente una versione più estesa del dizionario D&B, che contiene anche alcuni termini presi da Grundl.

### **1) First step, import the words and create the dictionary**

```
# 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)]))

```

```

my_dictionary <- dictionary(list(populism = c(Rooduijn_Pauwels_Italian$populism,
  Grundl_Italian_adapted$populism,
  Decadri_Boussalis$populism,
  Decadri_Boussalis_Grundl$people,
  Decadri_Boussalis_Grundl$common_will,
  Decadri_Boussalis_Grundl$elite)))

head(my_dictionary$populism)

```

I also create one extra dictionary that include all the populist words

```

## [1] "antidemocratic*" "casta"          "consens*"      "corrot*"
## [5] "disonest*"       "elit*"

```

```

tail(my_dictionary$populism)

```

```

## [1] "raccomandati"
## [2] "bugie dei partiti, falsita dei partiti"
## [3] "mazzett?"
## [4] "prendere in giro, bullarsi di"
## [5] "banchier?"
## [6] "lobbist*"

```

## 2) Import the DFM prepared in previous steps and apply dictionaries

```
# Daily Dictionary analysis with Decadri_Boussalis_Grundl on the whole dataset
dfm_dict1 <- dfm_lookup(DFM_trimmed, dictionary = Decadri_Boussalis_Grundl)
# Group by date
dfm_by_date1 <- dfm_group(dfm_dict1, groups= date)
dfm_by_date1
```

### Decadri\_Boussalis\_Grundl

```
## Document-feature matrix of: 839 documents, 3 features (12.08% sparse) and 3 docvars.
##           features
## docs      people common_will elite
## 2020-01-01      1           0     1
## 2020-01-02      7           1     6
## 2020-01-03      8           1     6
## 2020-01-04     20           0     4
## 2020-01-05     22           1     3
## 2020-01-06      8           0     4
## [ reached max_ndoc ... 833 more documents ]
```

```
# Group by week
dfm_by_week1 <- dfm_group(dfm_dict1, groups= week)
dfm_by_week1
```

```
## Document-feature matrix of: 121 documents, 3 features (0.55% sparse) and 1 docvar.
##           features
## docs people common_will elite
## 1      58           3     20
## 2     154          26     54
## 3     232          25     91
## 4     248          11     99
## 5     249          17     73
## 6     166           7     83
## [ reached max_ndoc ... 115 more documents ]
```

```
# Group by month
dfm_by_month1 <- dfm_group(dfm_dict1, groups= month)
dfm_by_month1
```

```
## Document-feature matrix of: 28 documents, 3 features (0.00% sparse) and 1 docvar.
##           features
## docs people common_will elite
## 1     890          80    334
## 2     763          42    341
## 3     892          37    248
## 4     768          21    415
## 5     689          14    376
## 6     636          24    424
## [ reached max_ndoc ... 22 more documents ]
```

```
# Daily Dictionary analysis with Rooduijn_Pauwels_Italian on the whole dataset
dfm_dict2 <- dfm_lookup(DFM_trimmed, dictionary = Rooduijn_Pauwels_Italian)
# Group by date
dfm_by_date2 <- dfm_group(dfm_dict2, groups= date)
dfm_by_date2
```

## Rooduijn\_Pauwels\_Italian

```
## Document-feature matrix of: 839 documents, 1 feature (0.60% sparse) and 3 docvars.
##           features
## docs      populism
## 2020-01-01         1
## 2020-01-02         5
## 2020-01-03         6
## 2020-01-04         4
## 2020-01-05         3
## 2020-01-06         4
## [ reached max_ndoc ... 833 more documents ]
```

```
# Group by week
dfm_by_week2 <- dfm_group(dfm_dict2, groups= week)
dfm_by_week2
```

```
## Document-feature matrix of: 121 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1         19
## 2         50
## 3         84
## 4         92
## 5         67
## 6         77
## [ reached max_ndoc ... 115 more documents ]
```

```
# Group by month
dfm_by_month2 <- dfm_group(dfm_dict2, groups= month)
dfm_by_month2
```

```
## Document-feature matrix of: 28 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1         309
## 2         311
## 3         233
## 4         399
## 5         336
## 6         400
## [ reached max_ndoc ... 22 more documents ]
```

```
# Daily Dictionary analysis with Grundl_Italian_adapted on the whole dataset
dfm_dict3 <- dfm_lookup(DFM_trimmed, dictionary = Grundl_Italian_adapted)
# Group by date
dfm_by_date3<- dfm_group(dfm_dict3, groups= date)
dfm_by_date3
```

## Grundl\_Italian\_adapted

```
## Document-feature matrix of: 839 documents, 1 feature (0.24% sparse) and 3 docvars.
##           features
## docs      populism
## 2020-01-01         0
## 2020-01-02         3
## 2020-01-03         3
## 2020-01-04         1
## 2020-01-05        20
## 2020-01-06        23
## [ reached max_ndoc ... 833 more documents ]
```

```
# Group by week
dfm_by_week3 <- dfm_group(dfm_dict3, groups= week)
dfm_by_week3
```

```
## Document-feature matrix of: 121 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1         27
## 2         98
## 3         97
## 4         73
## 5         91
## 6         69
## [ reached max_ndoc ... 115 more documents ]
```

```
# Group by month
dfm_by_month3 <- dfm_group(dfm_dict3, groups= month)
dfm_by_month3
```

```
## Document-feature matrix of: 28 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1        376
## 2        331
## 3        293
## 4        413
## 5        445
## 6        278
## [ reached max_ndoc ... 22 more documents ]
```

```

# Daily Dictionary analysis with Decadri_Boussalis on the whole dataset
dfm_dict4 <- dfm_lookup(DFM_trimmed, dictionary = Decadri_Boussalis)
# Group by date
dfm_by_date4<- dfm_group(dfm_dict4, groups= date)
dfm_by_date4

```

## Decadri\_Boussalis

```

## Document-feature matrix of: 839 documents, 1 feature (0.00% sparse) and 3 docvars.
##           features
## docs      populism
## 2020-01-01         2
## 2020-01-02        13
## 2020-01-03        16
## 2020-01-04        24
## 2020-01-05        26
## 2020-01-06        13
## [ reached max_ndoc ... 833 more documents ]

```

```

# Group by week
dfm_by_week4 <- dfm_group(dfm_dict4, groups= week)
dfm_by_week4

```

```

## Document-feature matrix of: 121 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1         81
## 2        215
## 3        324
## 4        346
## 5        329
## 6        252
## [ reached max_ndoc ... 115 more documents ]

```

```

# Group by month
dfm_by_month4 <- dfm_group(dfm_dict4, groups= month)
dfm_by_month4

```

```

## Document-feature matrix of: 28 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1        1237
## 2        1106
## 3        1132
## 4        1183
## 5        1045
## 6        1059
## [ reached max_ndoc ... 22 more documents ]

```

```
# Daily Dictionary analysis with my_dictionary on the whole dataset
dfm_dict5 <- dfm_lookup(DFM_trimmed, dictionary = my_dictionary)
# Group by date
dfm_by_date5<- dfm_group(dfm_dict5, groups= date)
dfm_by_date5
```

## My dictionary

```
## Document-feature matrix of: 839 documents, 1 feature (0.00% sparse) and 3 docvars.
##           features
## docs      populism
## 2020-01-01         2
## 2020-01-02        16
## 2020-01-03        18
## 2020-01-04        25
## 2020-01-05        45
## 2020-01-06        36
## [ reached max_ndoc ... 833 more documents ]
```

```
# Group by week
dfm_by_week5 <- dfm_group(dfm_dict5, groups= week)
dfm_by_week5
```

```
## Document-feature matrix of: 121 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1      106
## 2      301
## 3      405
## 4      398
## 5      399
## 6      306
## [ reached max_ndoc ... 115 more documents ]
```

```
# Group by month
dfm_by_month5 <- dfm_group(dfm_dict5, groups= month)
dfm_by_month5
```

```
## Document-feature matrix of: 28 documents, 1 feature (0.00% sparse) and 1 docvar.
##           features
## docs populism
## 1      1541
## 2      1352
## 3      1381
## 4      1492
## 5      1424
## 6      1282
## [ reached max_ndoc ... 22 more documents ]
```