Dictionary Analysis

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Contents

RICORSO ALLA RETORICA POPULISTA.

At the level of political parties, which ones make most use of populist rhetoric?

At the level of individual politicians, which ones make most use of populist rhetoric?

- 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: this is simply a more extended version of the D&B dictionary, which also contains some terms taken from 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

Decadri_Boussalis_Grundl

Level of sparsity

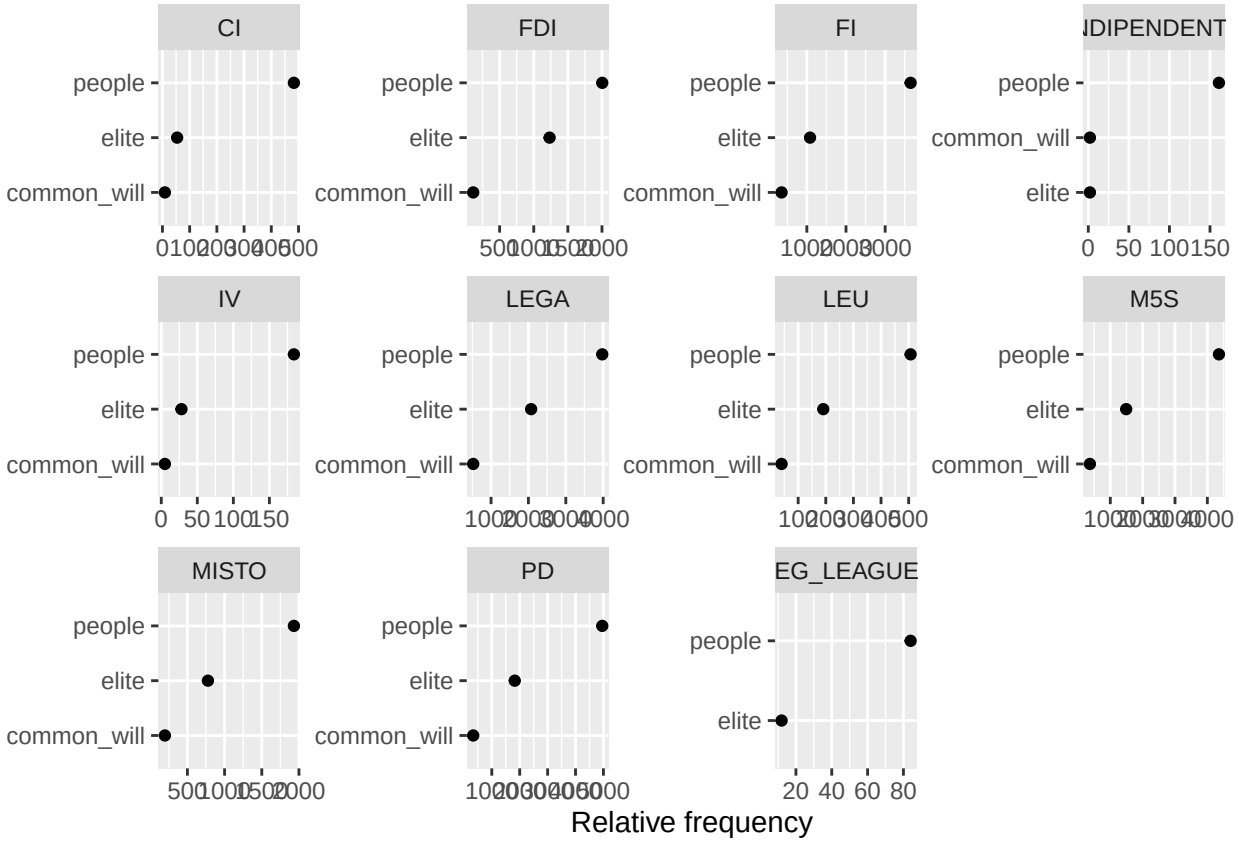
daily: 12.08%

weekly: 0.55%

monthly: 0%

```
# 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)
#kable(head(dfm_by_date1,10))
```

```
# Group by week
dfm_by_week1 <- dfm_group(dfm_dict1, groups= week)
#kable(head(dfm_by_week1,10))
# Group by month
dfm_by_month1 <- dfm_group(dfm_dict1, groups= month)
#kable(dfm_by_month1)
```



Looking at the distribution of populist rhetoric for each party divided into the 3 components people-centrism, anti-elitism and comon-will, we note that the most frequent components is People-centrism

Rooduijn_Pauwels_Italian

```
# 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)
#kable(head(dfm_by_date2,10))
# Group by week
dfm_by_week2 <- dfm_group(dfm_dict2, groups= week)
#kable(head(dfm_by_week2,10))
# Group by month
dfm_by_month2 <- dfm_group(dfm_dict2, groups= month)
#kable(dfm_by_month2)
```

General level of populism in time

Most populist party

```
# Most populist party
dfm_dict2_tstat_party <- textstat_frequency(dfm_dict2, groups = party_id)
kable(dfm_dict2_tstat_party %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
6	populism	1992	1	1919	LEGA
10	populism	1738	1	1658	PD
8	populism	1214	1	1119	M5S
2	populism	1177	1	1124	FDI
3	populism	983	1	941	FI
9	populism	696	1	669	MISTO
7	populism	182	1	175	LEU
1	populism	47	1	45	CI
5	populism	28	1	26	IV
11	populism	12	1	11	REG_LEAGUES

Most populist politician

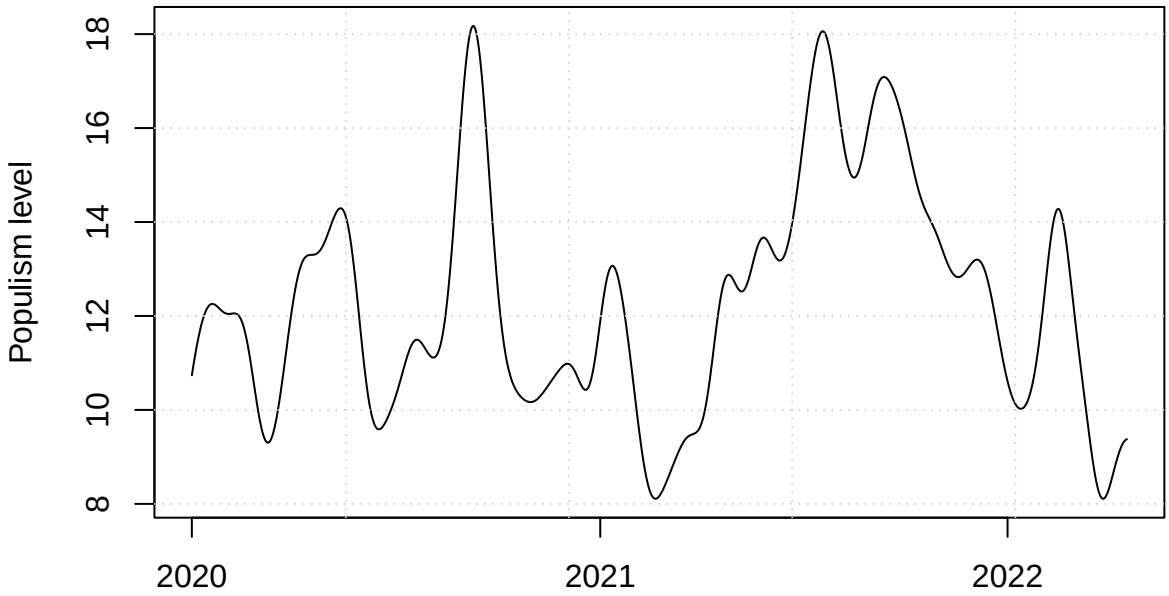
```
dict2_tstat_nome <- textstat_frequency(dfm_dict2, groups = nome)

kable(dict2_tstat_nome %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
325	populism	205	1	192	MELONI Giorgia
230	populism	162	1	155	GARNERO SANTANCHE' Daniela
471	populism	162	1	160	SGARBI Vittorio
271	populism	160	1	149	LANNUTTI Elio
194	populism	147	1	146	FERRERO Roberta
40	populism	113	1	110	BERGESIO Giorgio Maria
282	populism	112	1	108	LOLLOBRIGIDA Francesco
359	populism	112	1	105	NOBILI Luciano
454	populism	94	1	93	SALVINI Matteo
14	populism	93	1	90	ANZALDI Michele

Grundl_Italian_adapted

```
# 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)
#kable(head(dfm_by_date3,10))
# Group by week
dfm_by_week3 <- dfm_group(dfm_dict3, groups= week)
#kable(head(dfm_by_week3,10))
# Group by month
dfm_by_month3 <- dfm_group(dfm_dict3, groups= month)
#kable(dfm_by_month3)
```

General level of populism in time



Most populist party

```
# Most populist party
dict_3_tstat_party <- textstat_frequency(dfm_dict3, groups = party_id)
kable(dict_3_tstat_party %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
6	populism	2145	1	2075	LEGA
10	populism	2084	1	2000	PD
8	populism	1860	1	1724	M5S
3	populism	1586	1	1524	FI
2	populism	1115	1	1087	FDI
9	populism	1051	1	997	MISTO
7	populism	239	1	231	LEU
1	populism	162	1	157	CI
5	populism	40	1	40	IV
4	populism	31	1	31	INDIPENDENTE

Most populist politician

```
dict_3_tstat_nome <- textstat_frequency(dfm_dict3, groups = nome)

kable(dict_3_tstat_nome %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
287	populism	255	1	240	LANNUTTI Elio
493	populism	191	1	184	SGARBI Vittorio
340	populism	163	1	159	MELONI Giorgia
248	populism	143	1	139	GARNERO SANTANCHE' Daniela
561	populism	140	1	131	VITO Elio
275	populism	128	1	120	IEZZI Igor Giancarlo
475	populism	124	1	122	SALVINI Matteo
15	populism	123	1	120	ANZALDI Michele
44	populism	122	1	120	BERGESIO Giorgio Maria
210	populism	113	1	110	FERRERO Roberta

Decadri_Boussalis

```
# 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)
#kable(head(dfm_by_date4,10))
# Group by week
dfm_by_week4 <- dfm_group(dfm_dict4, groups= week)
#kable(head(dfm_by_week4,10))
# Group by month
dfm_by_month4 <- dfm_group(dfm_dict4, groups= month)
#kable(dfm_by_month4)
```

General level of populism in time

Most populist party

```
# Most populist party
dict_4_tstat_party <- textstat_frequency(dfm_dict4, groups = party_id)
kable(dict_4_tstat_party %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
10	populism	6878	1	6325	PD
6	populism	6097	1	5672	LEGA
8	populism	5670	1	5178	M5S
3	populism	4890	1	4532	FI
2	populism	3273	1	2960	FDI
9	populism	2694	1	2463	MISTO
7	populism	735	1	659	LEU
1	populism	545	1	506	CI
5	populism	214	1	197	IV
4	populism	166	1	153	INDIPENDENTE

Most populist politician

```
dict_4_tstat_nome <- textstat_frequency(dfm_dict4, groups = nome)

kable(dict_4_tstat_nome %>% slice_max(frequency, n = 10))
```

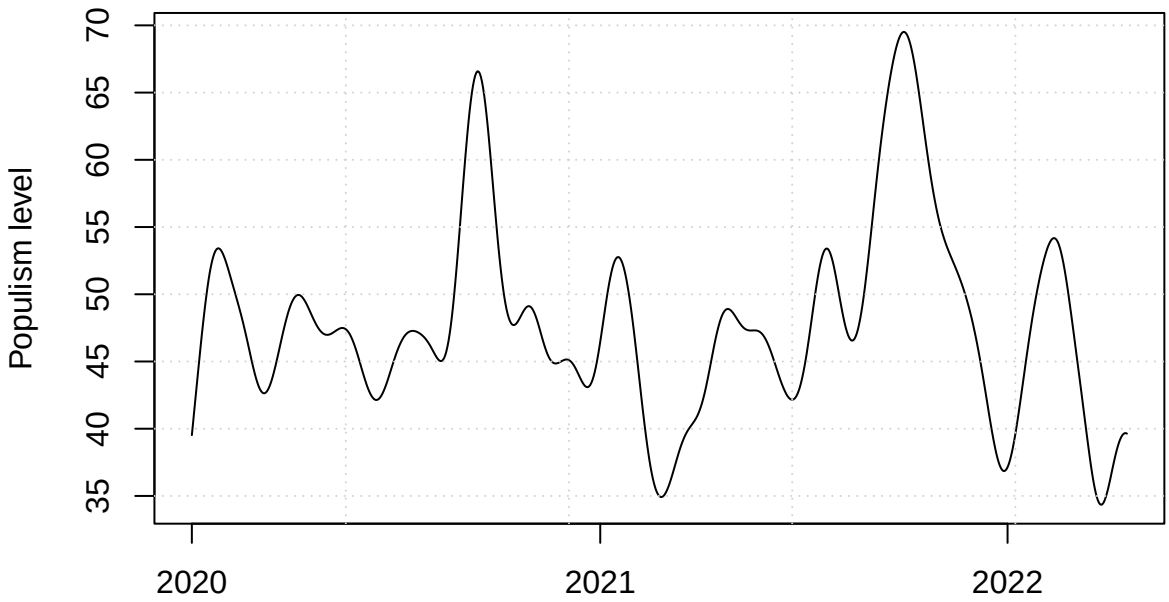
	feature	frequency	rank	docfreq	group
390	populism	561	1	496	MELONI Giorgia
559	populism	486	1	443	SGARBI Vittorio
329	populism	435	1	397	LANNUTTI Elio
280	populism	423	1	372	GARNERO SANTANCHE' Daniela
343	populism	406	1	358	LOLLOBRIGIDA Francesco
539	populism	396	1	368	SALVINI Matteo
584	populism	344	1	327	TAJANI Antonio
47	populism	338	1	318	BERGESIO Giorgio Maria
236	populism	304	1	282	FERRERO Roberta
602	populism	272	1	255	TOTI Giovanni

Extra dictionary

I also added one extra dictionary including all the populist words

```
# 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)
#kable(head(dfm_by_date5,10))
# Group by week
dfm_by_week5 <- dfm_group(dfm_dict5, groups= week)
#kable(head(dfm_by_week5,10))
# Group by month
dfm_by_month5 <- dfm_group(dfm_dict5, groups= month)
#kable(head(dfm_by_month5))
```

General level of populism in time



Most populist party

```
# Most populist party
dict_5_tstat_party <- textstat_frequency(dfm_dict5, groups = party_id)
kable(dict_5_tstat_party %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
10	populism	8534	1	7744	PD
6	populism	8024	1	7353	LEGA
8	populism	7224	1	6386	M5S
3	populism	6267	1	5703	FI
2	populism	4289	1	3833	FDI
9	populism	3579	1	3219	MISTO
7	populism	929	1	820	LEU
1	populism	700	1	645	CI
5	populism	251	1	233	IV
4	populism	197	1	181	INDIPENDENTE

Most populist politician

```
dict_5_tstat_nome <- textstat_frequency(dfm_dict5, groups = nome)

kable(dict_5_tstat_nome %>% slice_max(frequency, n = 10))
```

	feature	frequency	rank	docfreq	group
397	populism	703	1	616	MELONI Giorgia
336	populism	667	1	575	LANNUTTI Elio
569	populism	640	1	569	SGARBI Vittorio
287	populism	552	1	475	GARNERO SANTANCHE' Daniela
549	populism	521	1	469	SALVINI Matteo
350	populism	502	1	437	LOLLOBRIGIDA Francesco
48	populism	447	1	409	BERGESIO Giorgio Maria
243	populism	407	1	377	FERRERO Roberta
594	populism	387	1	366	TAJANI Antonio
90	populism	352	1	333	BRUGNARO Luigi