

# Political Context Analysis

Delivery date: 28/10/2021

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# Topics addressed, goals and urls

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- The relation between their ideology and voting party
- Voter participation and concern about the issues raised in the survey
- Opinion on the independence of Catalonia and national identity

Enquesta sobre context polític a Catalunya.  
2021

Qüestionari



<https://ceo.gencat.cat/ca/barometre/detall/index.html?id=7988>

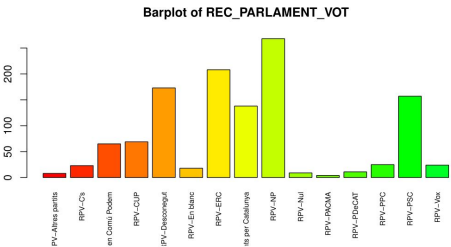
[http://upceo.ceo.gencat.cat/wsceop/7988/Q%C3%BCEstionari\\_996.pdf](http://upceo.ceo.gencat.cat/wsceop/7988/Q%C3%BCEstionari_996.pdf)

# Data Mining Process



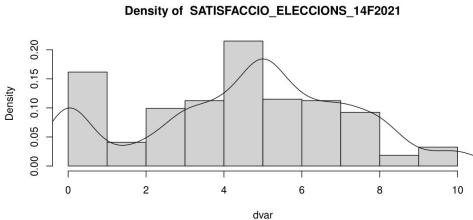
# Descriptive Analysis

35. (PART\_PARLAMENT =5) I em podria dir a quin partit o coalició va votar en les darreres eleccions al Parlament de Catalunya del 14 de febrer? (Indicadores: REC\_PARLAMENT\_VOT; REC\_PARLAMENT\_VOT\_LITERALS)









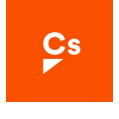



Ara li preguntaré sobre les últimes eleccions al Parlament de Catalunya del passat 14 de febrer

32. Quin és el seu grau de satisfacció amb el resultat d'aquestes eleccions, en una escala del 0 al 10, on 0 és molt insatisfet/a i 10 molt satisfet/a (Indicador: SATISFACCIO\_ELECCIONS\_14F2021)



variable	Min.	X1st.Qu.	Median	Mean	X3rd.Qu.	Max.
Min. SATISFACCIO_ELECCIONS_14F2021	0	3	5	4.609912	7	10

Political Parties	Election	Representation in our Dataset	Mean Satisfaction	Mean "Catalan Love"	Mean "Spanish Love"
	33  16 (23.06 %)	13.08 %	4.22	5.3	5.87
	33  1 (21,3%)	17.3 %	6.15	7.88	2.38
	32  3 (20.07%)	11.5 %	6.41	8.93	1.45
	11  11 (7.67 %)	2 %	1.88	4.33	7.08
	6  30 (5.58 %)	2 %	2.52	3.26	6.79

# Univariate Descriptive Analysis

## Numerical

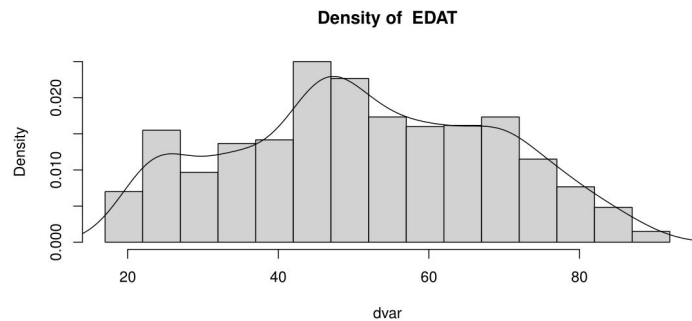


Table 8: Summary of the Variable

	variable	Min.	X1st.Qu.	Median	Mean	X3rd.Qu.	Max.
Min.	EDAT	18	39	51	51.5375	65	90

## Categorical & Binary

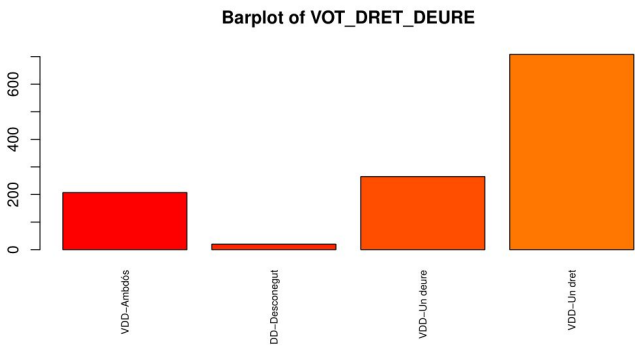
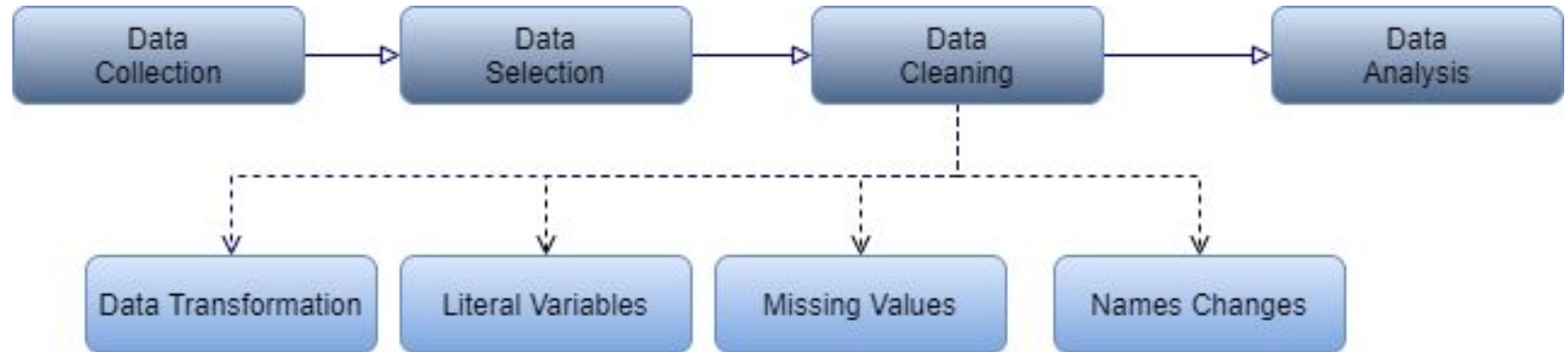


Table 28: Information about modalities of the Variable

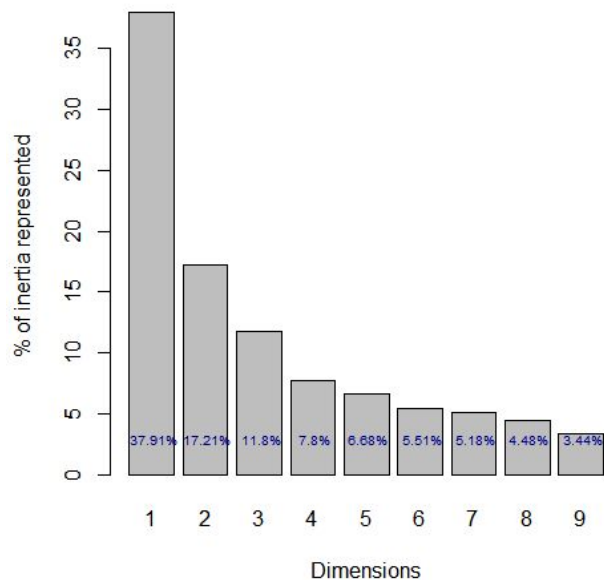
Modalities	Frequency	Proportion
VDD-Ambdós	207	0.1725000
VDD-Desconegut	20	0.0166667
VDD-Un deure	265	0.2208333
VDD-Un dret	708	0.5900000

# Preprocessing Steps

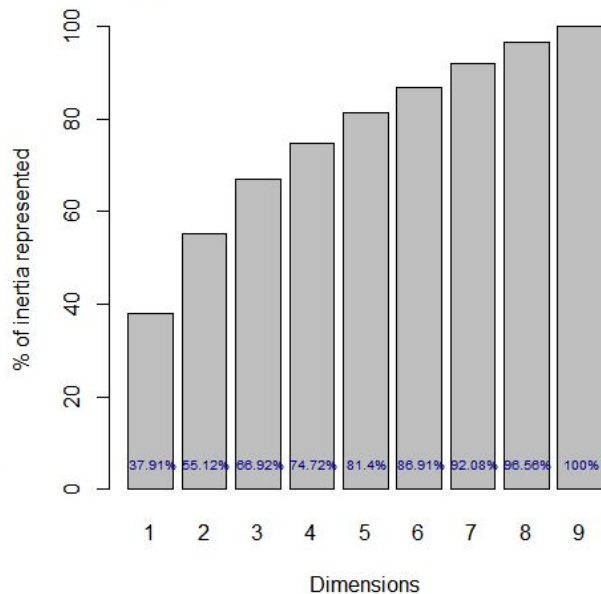


# PCA specifications

Subspace Representated Inertia



Subspace Cummulated Representated Inertia



Criteria: 80% inertia

Keep 5 components

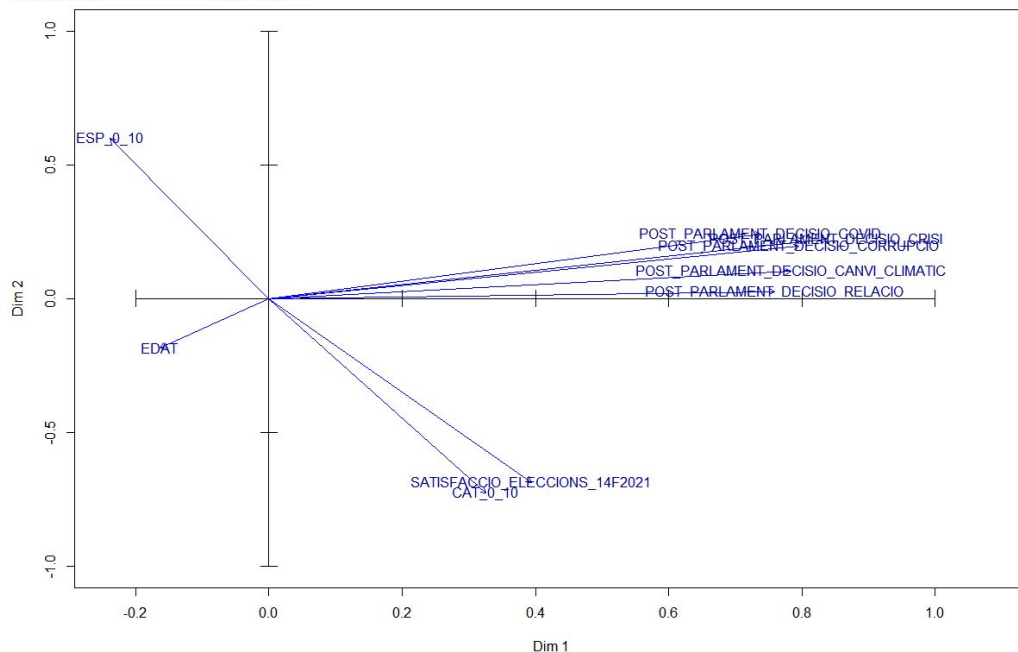


# First Factorial Plane for PCA (1)

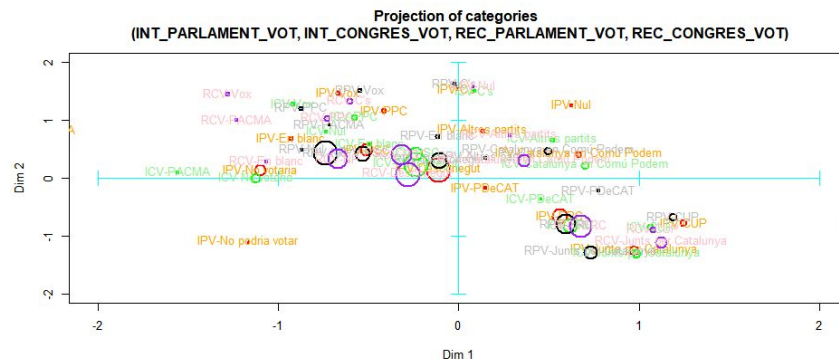
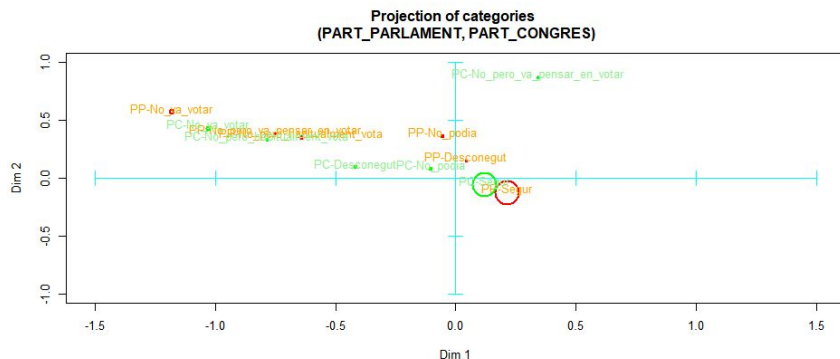
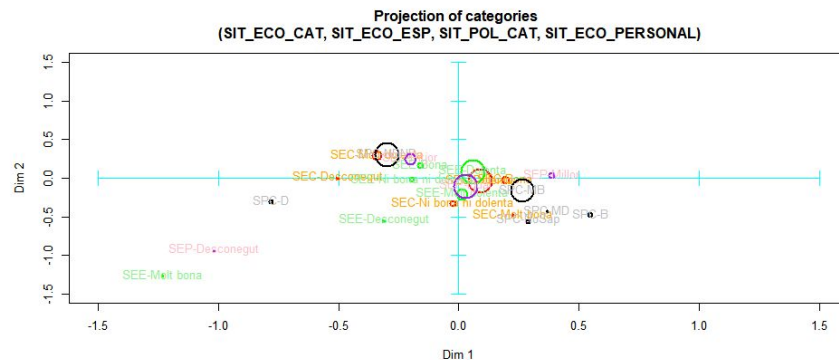
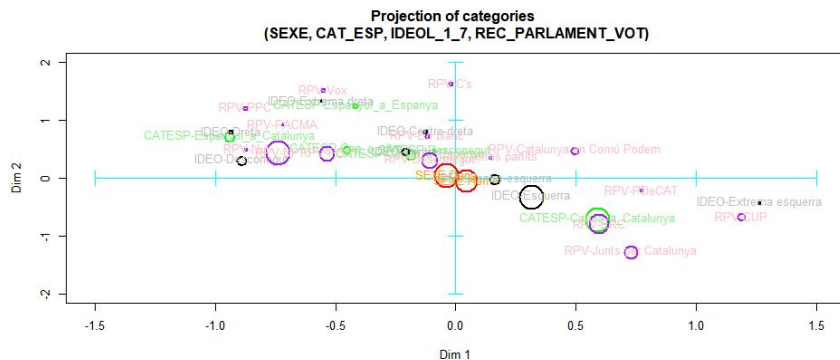
Candidacy	Parties and alliances	Leading candidate	Ideology	Previous result		Gov.	Ref.
				Votes (%)	Seats		
Cs	List <a href="#">[show]</a>	 Carlos Carrizosa	Liberalism	25.35%	36	✗	[50]
JxCat	List <a href="#">[show]</a>	 Laura Borràs	Catalan independence Populism	21.66% <sup>[a]</sup>	34	✓	[10] [51] [52] [53]
PDeCAT	List <a href="#">[show]</a>	 Àngels Chacòn	Catalan independence Liberalism			✗	[54] [55] [56]
ERC	List <a href="#">[show]</a>	 Pere Aragonès	Catalan independence Social democracy	21.38%	32	✓	[57] [58]
PSC-PSOE	List <a href="#">[show]</a>	 Salvador Illa	Social democracy	13.86%	17	✗	[59] [60]
ECP-PEC	List <a href="#">[show]</a>	 Jèssica Albiach	Left-wing populism Direct democracy Eco-socialism	7.46%	8	✗	[61] [62] [63]
CUP-G	List <a href="#">[show]</a>	 Dolors Sabater	Catalan independence Anti-capitalism Socialism	4.46%	4	✗	[64] [65]
PP	List <a href="#">[show]</a>	 Alejandro Fernández	Conservatism Christian democracy	4.24%	4	✗	[66] [67]
Vox	List <a href="#">[show]</a>	 Ignacio Garriga	Right-wing populism Ultrnationalism National conservatism	Did not contest		✗	[68]



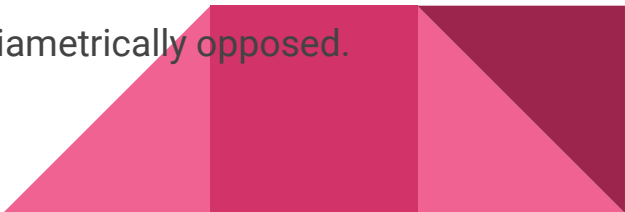
Projection of numeric variables



# First Factorial Plane for PCA (2)

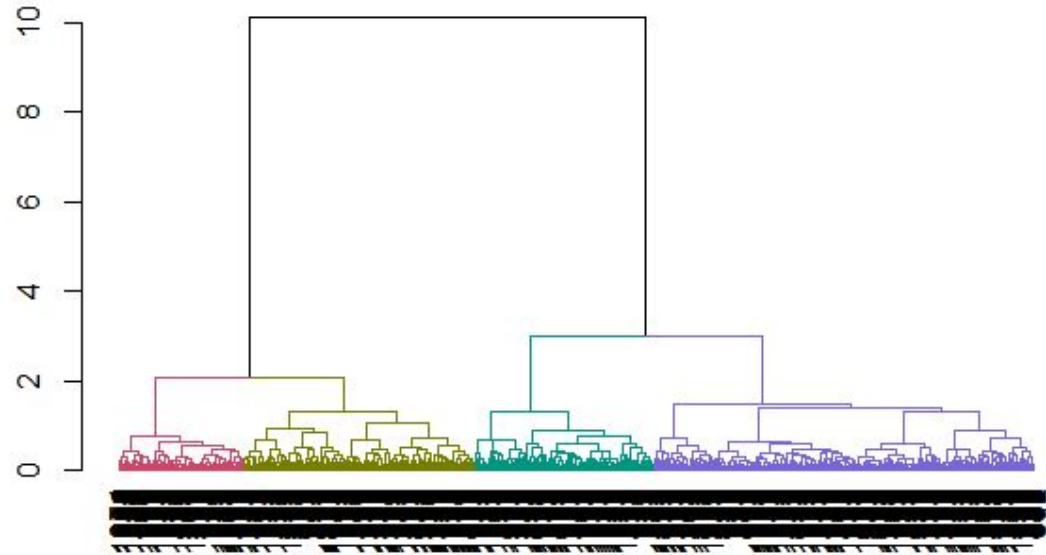


# Conclusions of the PCA

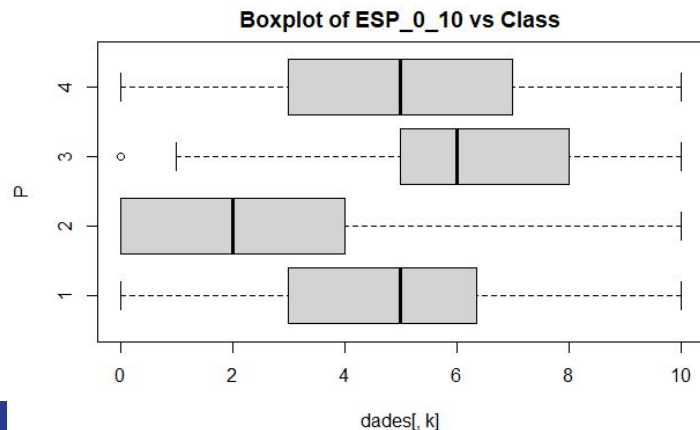
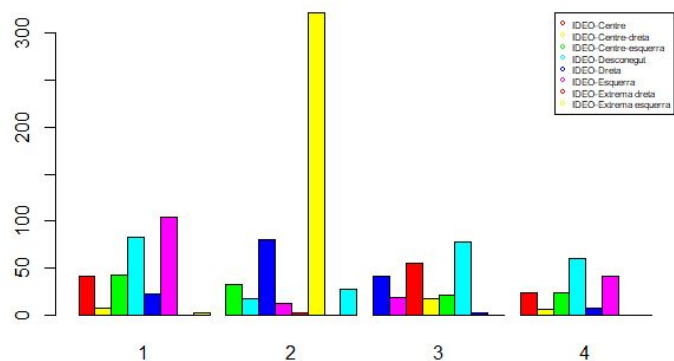
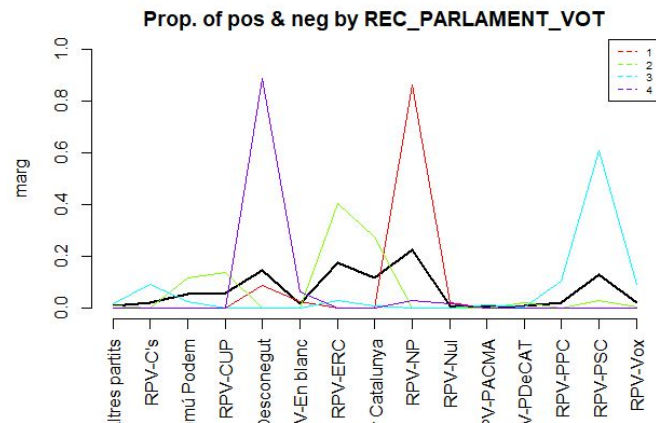
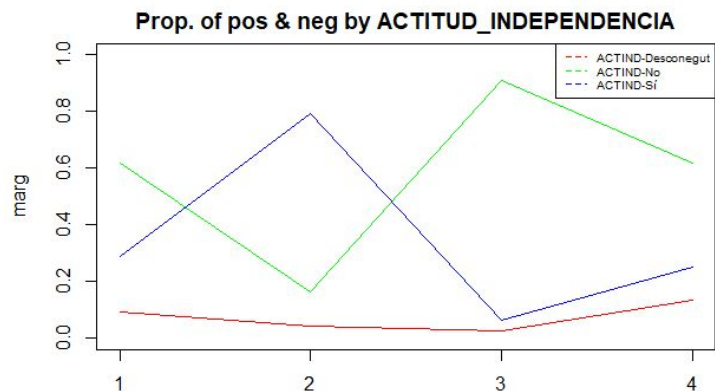
- UL:
    - Spanish nationalism/sentiment, center or right-leaning.
    - Didn't vote.
    - Spanish economic situation is good and catalan one is bad. Personal economic situation worsened and catalan political situation is neither good or bad.
  - UR:
    - "Catalunya en Comú Podem" and "Other parties" votes.
  - LL:
    - Unknown answers to economic situation.
  - LR:
    - Opposite answers from UL quadrant.
    - However, "Junts per Catalunya" doesn't fall into left-leaning.
    - Answers about Spanish and Catalan economic situation are diametrically opposed.
- 

# Clustering Process

- dissimMatrix using gower as metric
- hclust using ward.D2 as method



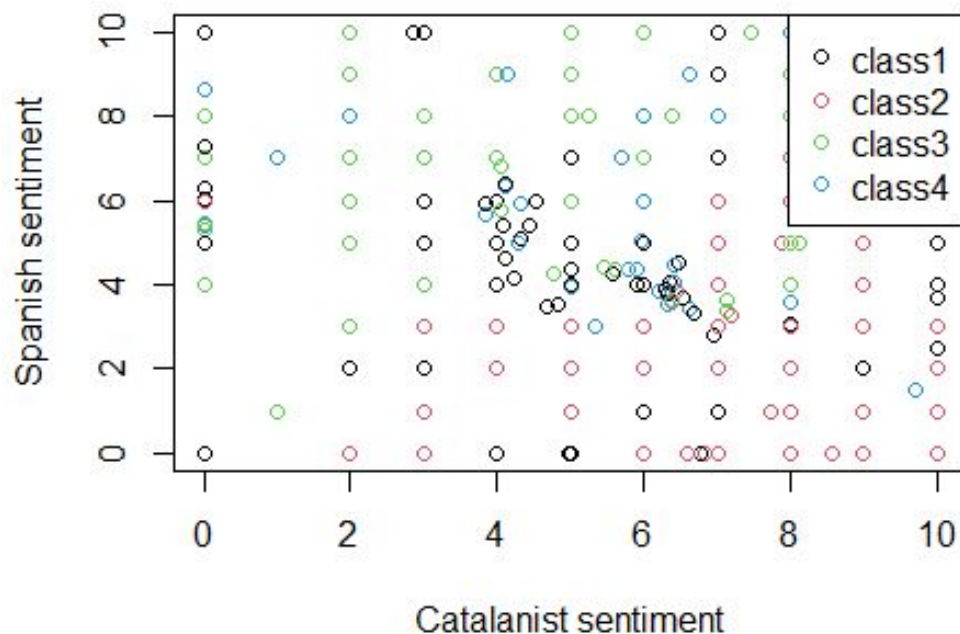
# Class interpretation tools



# Our clusters

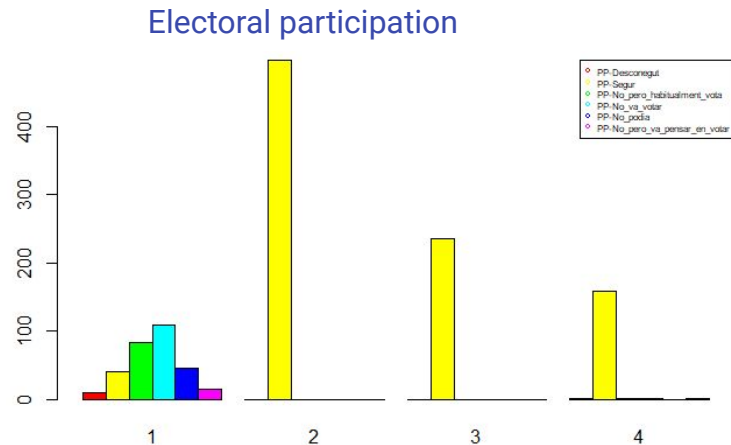
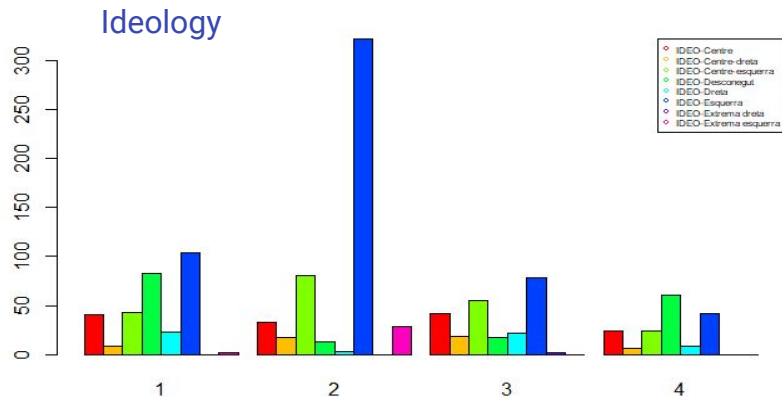
Class	1	2	3	4
N° of people	304	497	235	164

Clustering of credit data in 4 classes



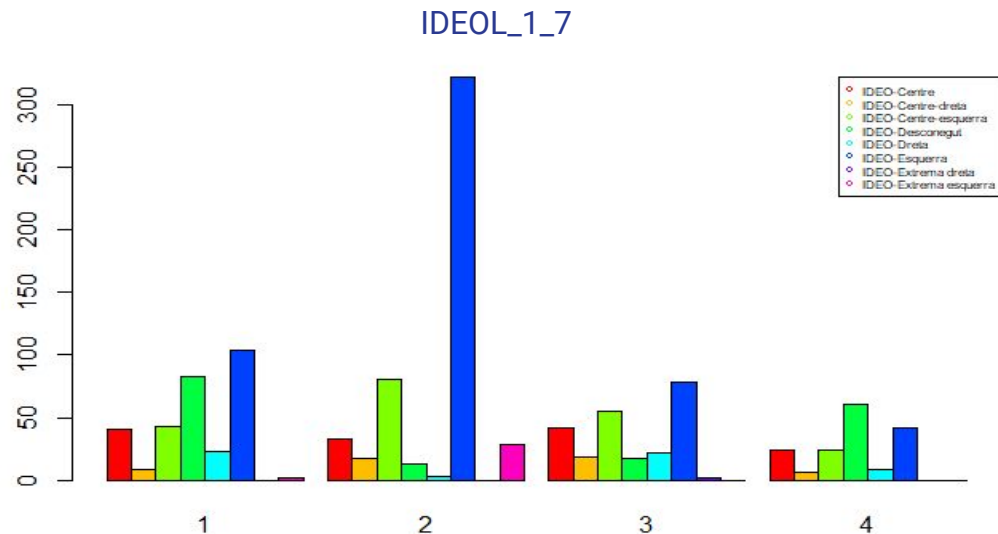
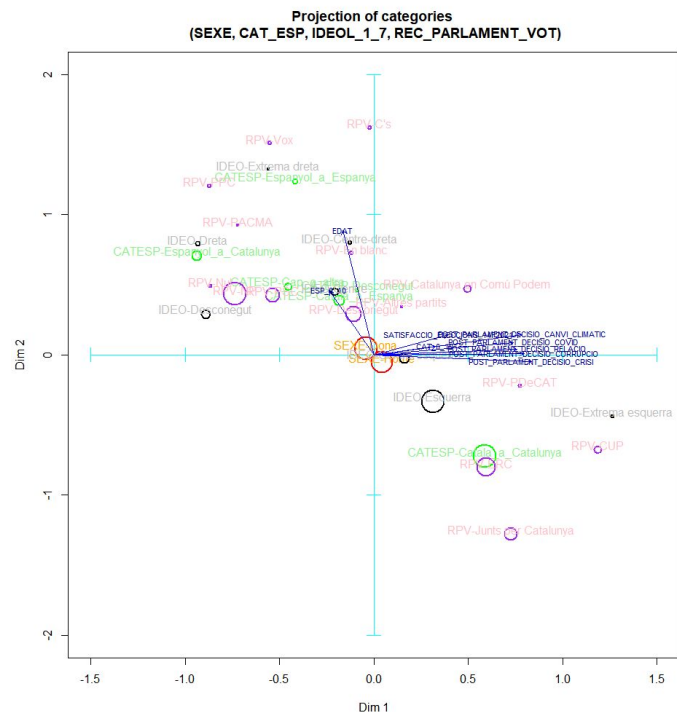
# Data profiling

- **Cluster 1:** Don't go to vote. Usually young people.
- **Cluster 2:** Left-leaning. Favorable to the independence of Catalonia.
- **Cluster 3:** Centre and right-wing ideology. More monarchical.
- **Cluster 4:** Little political definition. Tend to vote blank.



# Conclusions between PCA and clustering

Similar conclusions. Association between quadrants and clusters





# Original and final scheduling

[illegible]