Supplementary Appendix to "Preferences in Between: Moderates in the Catalan Secessionist Conflict", by Laia Balcells & Alexander Kuo

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Balcells & Kuo, "Preferences In Between" Supplementary Appendix

A. Descriptive statistics

Table A.1. Descriptive statistics, wave 1

Obs	Mean	Std. Dev.	Min	Max	%
,537			0	1	48.88%
,537	43.85	14.60	18	85	
,537			0	1	5.91%
,537			0	1	37.64%
,537			0	1	56.44%
,537			0	1	36.30%
,537			0	1	33.50%
,537			0	1	25.70%
,537	2.79	1.16	1	9	
,537	2612.34	1370.42	0	5500	
,537			0	1	65.94%
,537	6.83	2.55	1	10	
,537			0	1	44.42%
,537			0	1	35.55%
,537			0	1	16.63%
,537			0	1	3.39%
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Table A.2. Descriptive statistics, wave 2

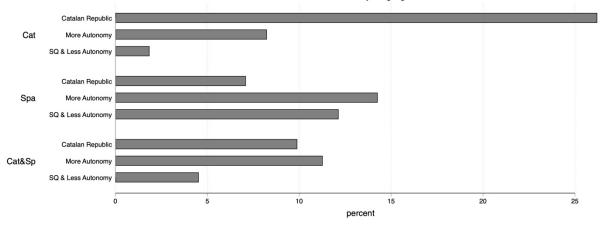
Variable	Obs	Mean	Std. Dev.	Min	Max	%
Female	1,721			0	1	47.30%
Age	1,721	46.53	14.40	18	86	
Education 1	1,676			0	1	5.07%
Education 2	1,676			0	1	37.77%
Education 3	1,676			0	1	57.16%
Language Catalan	1,676			0	1	37.77%
Language Spanish	1,676			0	1	32.58%
Language Catalan & Spanish	1,676			0	1	25.78%
Household Size	1,676	2.75	1.14	1	9	
Income	1,721	2545.58	1354.91	0	5500	
Employed	1,721			0	1	93.43%
Catalan Identity	1,721	6.74	2.72	1	10	
Catalan Republic	1,721			0	1	46.54%
More Autonomy	1,721			0	1	33%
Status Quo	1,721			0	1	15.28%
Less Autonomy	1,721			0	1	5.17%

			Wave 2	
		Catalan	More	
		Republic	Autonomy	SQ & Less Autonomy
	Catalan Republic	720 (93.26)	46 (5.96)	6 (0.78)
Wave 1	More Autonomy	59 (10.19)	461 (79.62)	59 (10.19)
	SQ & Less Autonomy	8 (2.46)	38 (11.69)	279 (85.85)
	Total	787 (46.96)	545 (32.52)	344 (20.53)

 Table A.3. Territorial preferences across waves (row percentages in brackets)

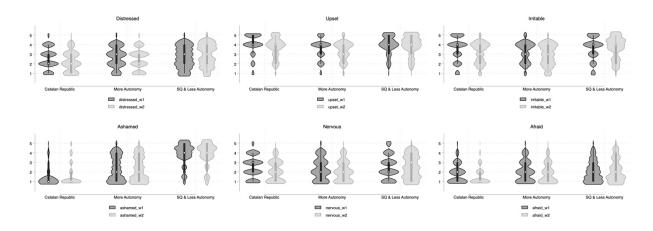
Note: Pearson chi2(4) is 2.1e+03, with Pr= 0.000

Figure A.1. Bivariate relationship between language spoken at home and territorial preferences, wave 1



Territorial Preferences by Language at Home

Note: Figure A.1 presents the bivariate relationship between territorial preferences and language spoken at home. Among those who speak only Catalan at home there is overwhelming support for independence, while support for more autonomy is lower than among Catalan speakers than among those who speak Spanish at home. Support for independence among only Spanish speakers is much lower. Among those who speak both Catalan and Spanish at home, more autonomy is the most popular choice, followed by independence.



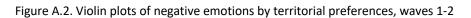
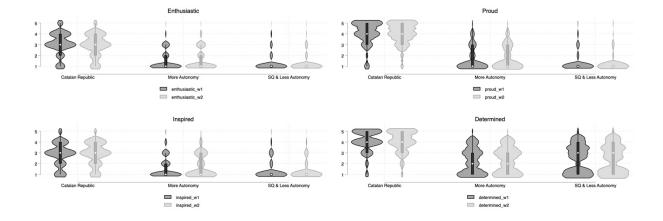


Figure A.3. Violin plots of positive emotions by territorial preferences, waves 1-2



B. Survey questions text and additional measurement

B.1. Territorial preference measurement

-Which of these phrases best represents your preference for the future political status of Catalonia?

- 1 I would like Catalonia to be an independent republic.
- 2 I would like Catalonia to be part of Spain, but to have more autonomy.
- 3 I would like Catalonia to continue being part of Spain as it is now.
- 4 I would like Catalonia to have less autonomy.

B.2. Support of government actions

[Below is the module of questions regarding support/opposition of actions taken by the Catalan and Spanish governments]

-We would like you to indicate whether you are for or against the following actions taken by the Spanish State and / or the Catalan institutions in recent months. Response options were: "strongly favor, somewhat favor, neither favor nor oppose, somewhat oppose, strongly oppose" [list of actions randomized]

- The celebration of a self-determination referendum in Catalonia on 1 October, 2017
- The declaration of independence of the Parliament of Catalonia on 27 October, 2017
- The actions that the Spanish State carried out on the day of the referendum of October 1, 2017
- The application of article 155 of the Constitution by the Spanish government in order to take control of the government of Catalonia
- The decision of the National Court (*Audiencia Nacional*) to imprison the pro-independence activists Jordi Cuixart and Jordi Sánchez, accused of crimes of sedition.
- The decision of the National Court (*Audiencia Nacional*) to imprison members of the Catalan government for their actions related to the approval of the legislation that allowed the October referendum and the declaration of independence of Catalonia.

B.3. Emotions related to the political context

We use standard emotions measurements from the Positive and Negative Affect Schedule, PANAS (Watson and Clark 1988). We measure six negative emotions (Distressed, Upset, Irritable, Ashamed, Nervous, Afraid), and four positive emotions (Enthusiastic, Proud, Inspired, Determined). In the survey, the question was formulated as follows:

-This scale consists of a number of words that describe different feelings and emotions. Read each item and then select how much you feel like this from the scale. Indicate to what extent you feel this way right now, that is, at the present moment, regarding the political situation in Catalonia [order of emotions randomized]:

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Distressed	0	0	0	0	О
Upset	0	0	0	0	0
Enthusiastic	0	0	0	0	0
Proud	0	0	O	0	0
Irritable	0	О	0	0	0
Ashamed	0	0	0	0	0
Inspired	0	0	0	0	0
Nervous	0	0	0	0	0
Determined	0	0	0	0	0
Afraid	0	Ο	Ο	0	0

B.4. Coding of sociodemographic variables and note on model specifications

We measure female gender (coded as 1, rest 0), education (1 as compulsory education, 2 as secondary and vocational education, 3 as some university experience), four age categories (18-34, 35-44, 45-54, 55+), adjusted income quintile (calculated using information from household income and number of people in a household), primary language(s) spoken at home (Catalan, Spanish, or both), and self-identification of Catalan (vs. Spanish) identity (1 to 10, recoded as approximately "terciles" of 1-4, 5-7, 8-10). For additional models we also measure and control for family origins (coding binary variables for if the individual and parents are all born outside of Catalonia, if individual is born in Catalonia but both parents are not, if individual is born in Catalonia but one parent is not, and finally, if individual and both parents were born in Catalonia). Unless otherwise noted, all models control for binary indicators of categories of the above variables. See Part A.

C. Multinomial logit estimation results for territorial preferences, wave 1

	SQ&Less Auto	More Autonomy	SQ&Less Auto	More Autonomy
Female	0.37**	0.39**	0.25**	0.25**
	(0.17)	(0.17)	(0.13)	(0.13)
Age 35-44	0.50**	0.47**	0.31*	0.30*
	(0.23)	(0.24)	(0.18)	(0.18)
Age 45-54	1.34***	1.31***	0.72***	0.71***
	(0.24)	(0.24)	(0.18)	(0.18)
Age 55+	0.97***	0.93***	0.71***	0.70***
	(0.23)	(0.23)	(0.16)	(0.17)
Inc Q2	-0.40	-0.39	-0.051	-0.047
	(0.26)	(0.26)	(0.20)	(0.20)
Inc Q3	-0.22	-0.21	-0.19	-0.19
	(0.26)	(0.26)	(0.19)	(0.19)
Inc Q4	-0.33	-0.33	-0.34*	-0.34*
	(0.27)	(0.27)	(0.20)	(0.20)
Inc Q5	-0.29	-0.30	-0.22	-0.21
	(0.28)	(0.28)	(0.21)	(0.21)
Unemployed	0.20	0.21	-0.28	-0.28
	(0.31)	(0.31)	(0.24)	(0.24)
Med Educ	0.031	0.069	0.35	0.35
	(0.39)	(0.39)	(0.31)	(0.31)
High Educ	-0.11	-0.094	0.16	0.16
-	(0.39)	(0.39)	(0.31)	(0.31)
Ideology	0.44***	0.45***	0.15***	0.15***
	(0.044)	(0.044)	(0.031)	(0.031)
Cat lang	-1.54***	-1.39***	-0.75***	-0.67***
0	(0.24)	(0.27)	(0.16)	(0.19)
Cat&Spa lang	-0.49 **	-0.38*	-0.14	-0.11
1 0	(0.20)	(0.22)	(0.17)	(0.17)
Med Cat ID	-3.30***	-3.18***	-1.65***	-1.60***
	(0.59)	(0.60)	(0.60)	(0.60)
High Cat ID	-7.74***	-7.60***	-4.55***	-4.48***
0	(0.65)	(0.66)	(0.60)	(0.61)
Born Cat, parents	()	-0.14	()	-0.12
not				
		(0.26)		(0.22)
Born Cat, 1		-0.50*		-0.072
parent not				-
		(0.29)		(0.23)
R & parents born		-0.31		-0.21
in Cat				
		(0.29)		(0.22)
Constant	2.01***	2.03***	2.21***	2.23***
	(0.73)	(0.73)	(0.68)	(0.68)
	2420	2420	2420	2420
N				

Table C.1: Regression results from multinomial logistic specification, wave 1

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01Catalan Republic is the base category in the multinomial logit

D. Additional multinomial logit estimation results, waves 1-2

Figure D.1. Correlates of territorial preferences: plotted marginal effects from multinomial logistic regression, wave 2

Marginal Effects (with 95% CIs) for Multinomial Logit

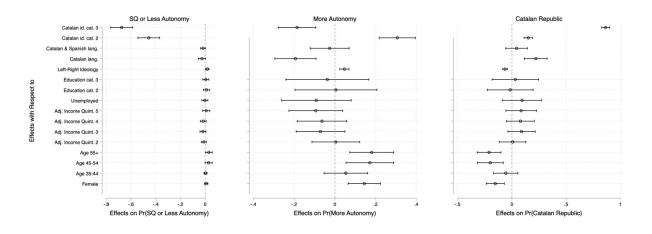
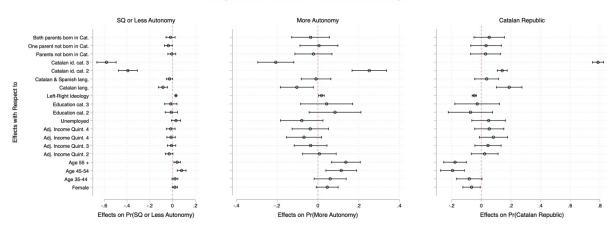


Figure D.2. Correlates of territorial preferences: plotted marginal effects from multinomial logistic regression with family origins, wave 1



Marginal Effects (with 95% CIs) for Multinomial Logit

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E. Regression results regional and central government actions support, waves 1-2

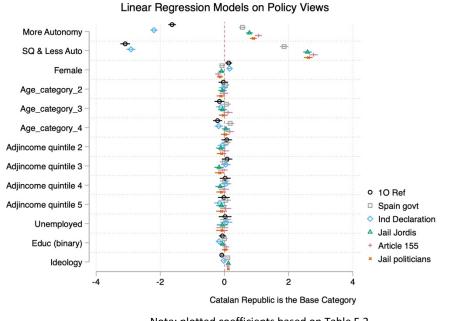
Table E.I. Territoria	10 Ref	Spa Govt	270	Jail Jordis	A155	Jail C Govt
More auto	-0.36***	0.088***	-0.55***	0.17***	0.22***	0.19***
	(0.020)	(0.018)	(0.019)	(0.019)	(0.018)	(0.019)
Pref SQ	-0.59***	0.53***	-0.57***	0.66***	0.68***	0.66***
	(0.026)	(0.024)	(0.025)	(0.025)	(0.024)	(0.025)
Female	0.019	-0.032**	0.015	-0.0046	-0.041***	-0.01
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Age 35-44	-0.030	0.015	-0.010	-0.00077	0.0091	0.00032
0	(0.018)	(0.017)	(0.018)	(0.018)	(0.017)	(0.018)
Age 45-54	-0.084***	0.046**	-0.056***	0.011	0.027	0.012
-	(0.019)	(0.018)	(0.018)	(0.018)	(0.018)	(0.019)
Age 55+	-0.085***	0.058***	-0.061***	0.023	0.044**	0.021
0	(0.018)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Income Q2	0.011	0.011	0.0078	-0.012	0.012	0.0025
	(0.021)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Income Q3	0.016	-0.029	0.0043	-0.040**	-0.028	-0.041**
	(0.021)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Income Q4	0.024	-0.013	-0.0040	-0.028	-0.013	-0.030
	(0.022)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Income Q5	0.018	-0.040*	-0.032	-0.039*	-0.020	-0.043*
	(0.023)	(0.021)	(0.022)	(0.022)	(0.021)	(0.022)
Unemployed	-0.017	-0.035	-0.024	-0.042*	-0.032	-0.041
. ,	(0.026)	(0.024)	(0.025)	(0.025)	(0.024)	(0.025)
Med Educ	0.028	-0.0022	0.029	-0.0039	-0.028	0.023
	(0.030)	(0.028)	(0.028)	(0.028)	(0.028)	(0.029)
High Educ	0.044	-0.049*	-0.017	-0.027	-0.032	0.0004
-	(0.030)	(0.028)	(0.029)	(0.029)	(0.028)	(0.029)
Ideology	-0.016***	0.026***	-0.0049	0.023***	0.022***	0.024***
0,	(0.0033)	(0.0031)	(0.0032)	(0.0031)	(0.0031)	(0.0032)
Cat lang	0.0036	-0.015	0.059***	-0.018	-0.020	-0.011
-	(0.018)	(0.017)	(0.018)	(0.018)	(0.017)	(0.018)
Cat&Spa lang	0.044**	-0.0014	0.0086	-0.031*	-0.020	-0.020
	(0.018)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Med Cat ID	0.086***	-0.077***	-0.00047	-0.086***	-0.11***	-0.09***
	(0.024)	(0.023)	(0.023)	(0.023)	(0.023)	(0.024)
High Cat ID	0.35***	-0.12***	0.20***	-0.22***	-0.26***	-0.23***
-	(0.031)	(0.029)	(0.029)	(0.029)	(0.029)	(0.030)
Constant	0.65***	0.094**	0.63***	0.20***	0.24***	0.18***
	(0.044)	(0.041)	(0.042)	(0.042)	(0.041)	(0.043)
Ν	2519	2519	2519	2519	2519	2519
<i>R</i> ²	0.559	0.410	0.580	0.520	0.563	0.519

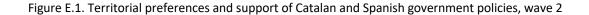
 Table E.1: Territorial preferences and support of Catalan and Spanish government policies, wave 1

Note: * p < 0.10, ** p < 0.05, *** p < 0.01. Standard errors in parentheses. Coefficients are from OLS estimations where DV is binary coding of support of policy. Policies are: October 1 referendum; Spanish actions October 1; October 27 independence declaration; imprisoning social activists; A155 activation; arresting Catalan government members. Baseline categories for demographic variables are "lowest" categories; territorial preference of support independence; "Spanish only" language, and lowest tercile of Catalan ID.

	10 Ref	Spa Govt	270	Jail Jordis	A155	Jail C Govt	Torra	Sanchez
More Auto	-0.38***	0.078***	-0.56***	0.14***	0.19***	0.16***	-0.42***	0.27***
	(0.026)	(0.025)	(0.025)	(0.024)	(0.025)	(0.025)	(0.029)	(0.037)
Supp SQ	-0.72***	0.50***	-0.62***	0.62***	0.65***	0.62***	-0.45***	0.073
	(0.033)	(0.033)	(0.032)	(0.031)	(0.031)	(0.032)	(0.037)	(0.047)
Female	0.014	-0.0060	0.021	-0.015	-0.030*	-0.021	0.020	0.0099
	(0.016)	(0.016)	(0.016)	(0.015)	(0.015)	(0.016)	(0.018)	(0.023)
35-44	-0.053**	0.028	-0.038*	0.014	0.0036	-0.0087	0.010	-0.0045
	(0.023)	(0.023)	(0.022)	(0.022)	(0.022)	(0.022)	(0.026)	(0.033)
45-54	-0.074***	0.047**	-0.047**	0.011	0.037	0.013	0.026	0.024
	(0.024)	(0.024)	(0.023)	(0.022)	(0.023)	(0.023)	(0.027)	(0.034)
55+	-0.059***	0.042*	-0.067***	0.0056	0.029	-0.013	0.100***	0.042
	(0.022)	(0.022)	(0.021)	(0.021)	(0.021)	(0.021)	(0.025)	(0.031)
Income Q2	0.046*	0.0082	0.044*	-0.069***	-0.031	-0.064***	-0.0056	-0.033
	(0.025)	(0.025)	(0.024)	(0.023)	(0.024)	(0.024)	(0.028)	(0.036)
Income Q3	0.021	-0.0098	0.023	-0.053**	-0.0051	-0.047*	0.035	-0.078**
	(0.025)	(0.025)	(0.024)	(0.023)	(0.024)	(0.024)	(0.028)	(0.036)
Income Q4	0.011	-0.016	0.018	-0.054**	-0.016	-0.042*	0.029	-0.044
	(0.026)	(0.026)	(0.025)	(0.024)	(0.025)	(0.025)	(0.029)	(0.037)
Income Q5	-0.0089	0.0053	-0.0097	-0.051**	-0.0052	-0.040	-0.026	0.021
	(0.028)	(0.028)	(0.027)	(0.026)	(0.027)	(0.027)	(0.031)	(0.040)
Unempl.	0.015	0.0077	0.041	-0.030	-0.042	-0.042	0.024	-0.043
	(0.033)	(0.032)	(0.032)	(0.031)	(0.031)	(0.032)	(0.037)	(0.047)
Med Educ	0.036	0.028	-0.015	0.051	0.038	0.020	-0.026	-0.018
	(0.038)	(0.038)	(0.037)	(0.036)	(0.036)	(0.037)	(0.043)	(0.054)
High Educ	0.038	0.0091	-0.041	0.0098	0.025	0.0079	-0.039	-0.038
	(0.038)	(0.038)	(0.037)	(0.036)	(0.037)	(0.037)	(0.043)	(0.055)
Ideology	-0.024***	0.028***	-0.0047	0.033***	0.031***	0.034***	0.013**	-0.014**
lacology	(0.0047)	(0.0047)	(0.0046)	(0.0044)	(0.0045)	(0.0046)	(0.0053)	(0.0067)
Cat lang	0.0065	-0.014	0.037*	-0.013	-0.045**	-0.0072	-0.0062	-0.020
cutiung	(0.022)	(0.022)	(0.022)	(0.021)	(0.021)	(0.022)	(0.025)	(0.032)
Cat&Spa I.	0.018	-0.00081	-0.018	0.0011	-0.021	0.011	0.0021	-0.028
catespa i.	(0.021)	(0.021)	(0.021)	(0.020)	(0.020)	(0.021)	(0.024)	(0.020)
Med Cat ID	0.074**	-0.053*	0.014	-0.14***	-0.089***	-0.13***	0.024)	0.098**
	(0.029)	(0.029)	(0.028)	(0.027)	(0.028)	(0.028)	(0.033)	(0.042)
High Cat ID	0.22***	-0.13***	0.20***	-0.24***	-0.23***	-0.25***	0.24***	-0.019
	(0.039)	(0.038)	(0.038)	(0.036)	(0.037)	(0.038)	(0.044)	(0.055)
Constant	0.80***	0.047	0.68***	0.20***	0.16***	0.22***	(0.044) 0.39***	0.57***
COnstant	(0.055)	(0.055)	(0.054)	(0.052)	(0.053)	(0.054)	(0.062)	(0.079)
N/	1662	· · ·					· · · · ·	· /
N P ²		1662	1662	1662	1662	1662	1662	1662
<i>R</i> ²	0.576	0.391	0.600	0.544	0.557	0.524	0.418	0.113

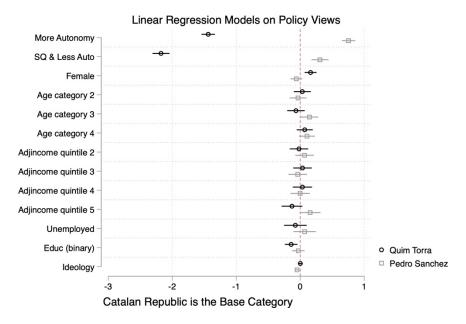
Note: * *p* < 0.10, ** *p* < 0.05, *** *p* < 0.01. Standard errors in parentheses. See previous table for discussion. Additional w2 policies were support for the new government in Catalonia led by Quim Torra and support for the Socialist government led by Pedro Sánchez.





Note: plotted coefficients based on Table E.2

Figure E.2. Territorial preferences and support for Spanish and Catalan government leaders, wave 2



Note: plotted coefficients based on Table E.2

F: Reasons for more autonomy

Table F.1. Correlates of fiscal reasons for preferring more autonomy, wave 1

	Fiscal reasons
Female	0.011
	(0.033)
35-44	0.068
	(0.046)
45-54	0.10**
	(0.048)
55+	0.037
	(0.046)
Inc Q2	-0.011
	(0.051)
Inc Q3	-0.0059
	(0.052)
Inc Q4	0.019
	(0.055)
Inc Q5	0.10*
	(0.055)
Unemployed	0.060
	(0.068)
Med Educ	-0.078
	(0.077)
High Educ	-0.040
	(0.078)
Ideology	0.026***
	(0.0088)
Cat lang	-0.023
	(0.044)
Cat&Spa lang	-0.036
	(0.039)
Med Cat ID	-0.014
	(0.060)
High Cat ID	0.040
	(0.070)
Constant	0.50***
	(0.11)
N	897
R^2	0.029

Note: Standard errors in parentheses. * *p* < 0.10, ** *p* < 0.05, *** *p* < 0.01

Coefficients are based on OLS estimation of fiscal reasons versus policy control reasons regarding support for autonomy. Sample is pro-autonomy individuals. Baselines as in previous tables.

G: Survey experiment regression results, wave 2

	(1)	(2)	(3)	(4)
	Trust_diff	Trust_diff	Trust_diff	Trust_diff
More auto	0.016	0.0024	0.016	-0.0060
	(0.014)	(0.015)	(0.014)	(0.015)
Pref independence	0.19***	0.093***	0.19***	0.090***
	(0.013)	(0.020)	(0.013)	(0.018)
Female		0.0044		0.0023
		(0.0098)		(0.0074)
Med Educ		-0.0020		0.015
		(0.022)		(0.017)
High Educ		0.00038		0.015
		(0.022)		(0.017)
Age 35-44		-0.021		0.0012
		(0.014)		(0.010)
Age 45-54		-0.015		-0.0094
		(0.014)		(0.011)
Age 55+		-0.029**		-0.025**
		(0.013)		(0.0100)
Unemployed		0.015		0.010
		(0.019)		(0.015)
Adjusted income Q2		0.0091		-0.0064
		(0.015)		(0.011)
Adjusted income Q3		0.0100		0.0035
		(0.015)		(0.011)
Adjusted income Q4		0.021		0.0044
		(0.016)		(0.012)
Adjusted income Q5		-0.0018		-0.011
		(0.017)		(0.013)
deology		-0.0001		-0.003
		(0.002)		(0.01)
Cat lang		-0.0061		-0.0030
		(0.013)		(0.0097)
Cat&Spa lang		0.032**		0.0096
		(0.013)		(0.010)
Med Catalan Identity		-0.0088		0.017
		(0.018)		(0.013)
High Catalan Identity		0.085***		0.12***
0 /		(0.024)		(0.018)
Trust prime		. ,	-0.16***	-0.16***
			(0.016)	(0.016)
More auto x Prime			0.18***	0.18***
			(0.020)	(0.020)
Pro ind x Prime			0.24***	0.24***
-			(0.019)	(0.019)
Constant	0.49***	0.50***	0.49***	0.48***
	(0.011)	(0.027)	(0.011)	(0.023)
N	874	843	1721	1662
R ²	0.281	0.329	0.440	0.471

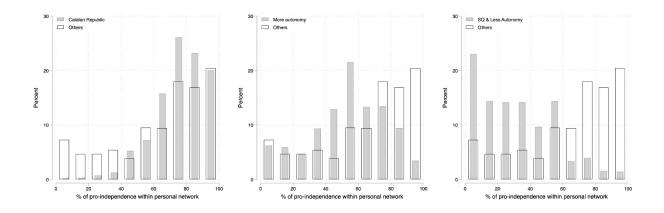
Table G1. Priming experiment regression results, wave 2

Note: * p < 0.10, ** p < 0.05, *** p < 0.01. Standard errors in parentheses. Results are linear model for differential trust on treatment assignment (primed about assessing Catalan trust first). Baselines are as in previous tables.

Balcells & Kuo, "Preferences In Between" Supplementary Appendix

H: Social network descriptive results, wave 1

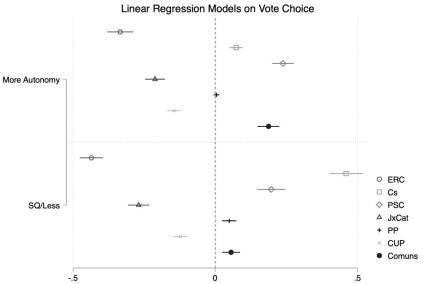
Figure H1: Personal Networks by Territorial Preference, wave 1



Balcells & Kuo, "Preferences In Between" Supplementary Appendix

I: Regressions on vote choice by territorial preferences, wave 2

Figure I.1. Vote choice by territorial preferences, wave 2



Control variables: female, age group, income group, unemployed, education, ideology, language at home, Catalan identity.

J. Sentiment Analysis, waves 1 and 2

In both waves, we included an open-ended survey question at the end of the questionnaire, in which people were invited to write down their thoughts about the political situation in Catalonia (the question was phrased as follows: "Please feel free to express your views regarding the situation in Catalonia."). Using R and Afinn lexicon, we analyzed the text in these responses with sentiment analysis. Using the independence scale (rescaled to 1-11, in which 1 is overwhelmingly against independence and 11 is overwhelmingly in favor of independence), we find that people at both extremes of this axis have more positive and negative sentiments about the political situation in Catalonia as compared to the people in-between (i.e., moderates) in the territorial issue.

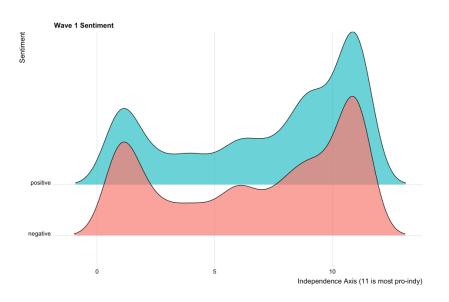


Figure J1: Territorial Preferences and Sentiments, wave 1

Figure J2: Territorial Preferences and Sentiments, wave 2

