Pre-Parliamentary Party Careers and District Congruence

Anne Skorkjær Binderkrantz, Marie Kaldahl Nielsen,
Helene Helboe Pedersen and Mathias Wessel Tromborg
Aarhus University, Denmark

ONLINE APPENDICES

Appendix A: Supplementary material for the sequence analysis

Tables A1 and A2 illustrate how the calculation of sequence similarity is done. Table A1 illustrates two ficticious pre-parliamentary party careers. "Peter" holds a party position from the age of 18 and wins a seat in parliament at the age of 27. "Julie" only holds a party position from the age of 23 and becomes Member of Parliament at the age of 25. To make Peter's sequence similar to Julie's we can either substitute, delete or insert a pre-parliamentary party position. In this specific case, we need to make five substitutions and two deletions to make Peter's sequences similar to Julie's. This is illustrated in Table A2. The substitution cost is set at two and a insertion or deletion at one, which means that the cost of making Peter's sequence similar to Julie's is 12.

Table A1. Example of career sequences

Age	18	19	20	21	22	23	24	25	26
Peter	1	1	3	3	3	8	8	8	8
Julie	0	0	0	0	0	8	8		

Table A2. Substitution example

Peter	1	1	3	3	3	8	8	8	8	
Transformation	1→0									Substitution
		1→0								Substitution
			3→0							Substitution
				3→0						Substitution
					3→0					Substitution
						0				
							0			
										Deletion
										Deletion
Julie	0	0	0	0	0	8	8			

Table A3 shows stratistics for the cohenrece of difference clustering opportunities. The first statistic, 'ASW', measures the average coherence of assignments. A high value indicates high between-group distances and strong within-group homogeneity . The second statistic, 'PBC', measures the capacity of a data partition to reproduce the distance matrix. Technically, this is measured by computing the association (Pearson's r) between the distance matrix and a second measure of distance which takes the value 0 for observations that are in the same group and 1 otherwise. Stronger correlation indicates stronger capacity of the clustering model. The third statistic, 'HC', compares the partition obtained with the best partition that could have been obtained with the given number of groups and the given distance matrix. A small value indicates a good partition of the data. (Studer, 2013; 13-14).

Table A3: Estimates of clustering quality

	2 Clusters	3 Clusters	4 Clusters	5 Clusters	6 Clusters
Average Silhouette Width (ASW)	0.31	0.30	0.19	0.20	0.2
Point Biserial Correlation (PBC)	0.50	0.62	0.45	0.49	0.43
Hubert's C (HC)	0.18	0.11	0.19	0.15	0.16

Appendix B: Models for temporal variation in pre-parliamentary party careers

Table B1: Multinominal regression model, party civilian as base

	Party Functionary	Party Local
Cohort 2010	0.154 (0.286)	0.759* (0.385)
Gender	0.154 (0.594)	0.581 (0.417)
Social Democrats (REF)		
Socialist Peoples' Party	-0.363 (0.430)	-1.036 (0.676)
Social Liberals	0.029 (0.375)	-1.229 (0.670)
Liberals	-0.693 (0.369)	-0.479 (0.430)
Conservatives	-1.122* (0.456)	-1.848* (0.783)
Red-Green Alliance (2010 only)[b]	0.726 (0.564)	-15.651 (1314.741)
Danish Peoples' Party (2010 only)	-0.623 (0.496)	-0.421 (0.545)
Liberal Alliance (2010 only)[b]	-2.090 (1.077)	-16.160 (1356.464)
Alternative (2010 only)[a]	-15.947 (1160.718)	-16-496 (1750.643)
Justice Party (1960 only)[a]	-15.840 (2460.802)	-15.920 (3758.937)
The Independent (1960 only)[a]	-15.840 (1230.401)	-15.920 (1879.469)
Liberal Center (1960 only)	0.546 (1.444)	-14.833 (3516.283)

Note: N=401, Log Likelihood = -324.58, *p<0.05
[a]All MPs from the Alternative, the Justice Party and The Independent (n=19) are Party Civilians and thus fully predicted, which makes the standard errors problematic.
[b]None MPs from the Red-Green Alliance, the Liberal Alliance or the Liberal Center are Party Locals, which make the standard errors questionable.

Table B2: Multinominal regression model, party civilian as base and excluding parties represented in only one cohort.

	Party Functionary	Party Local
Cohort 2010	0.262 (0.291)	0.824* (0.390)
Gender	0.507 (0.341)	0.808 (0.484)
Social Democrats (REF)		
Socialist Peoples' Party	-0.335 (0.432)	-1.020 (0.677)
Social Liberals	0.056 (0.377)	-1.212 (0.672)
Liberals	-0.712 (0.371)	-0.496 (0.431)
Conservatives	-1.126* (0.457)	-1.858* (0.784)

Note: N=131, Log Likelihood=-271.697, *p<0.05

Appendix C: Survey Items

This appendix shows the original wording and English translation of each of the 2015 VAA issue statements. The questions that were implemented in the mass survey are marked with an asterisk (*). The response categories are: 1 = Completely disagrees, 2 = partially disagrees, 3 = Neither agrees or disagrees, 4 = partially agrees, 5 = Completely agrees.

<u>2015 VAA questions</u>

Q1: Efter folkeskolereformen får eleverne for lange skoledage

Q1: After the elementary school reform students' have too long days in school

Q2: En længere periode af barselsorloven skal være øremærket til faderen.

Q2: A longer period of maternity leave should be earmarked for the father.

Q3: Afgiften på cigaretter skal sættes op

Q3: The cigarette tax should be increased

Q4: Et besøg hos den praktiserende læge skal koste eksempelvis 100 kr.

Q4: A doctor's visit should cost, for example, 100 Danish Kroner.

Q5: Mere af ældreplejen skal udliciteres til private virksomheder

Q5: More of the elderly care should be licensed to private companies

Q6: Afgifterne for privatbilisme skal sænkes, så det bliver billigere at køre i bil

Q6: Taxes on private transportation should be lower such that it becomes cheaper to drive a car

*Q7: Man skal hurtigere kunne genoptjene retten til dagpenge

Q7: People should be allowed to earn their daily transfer rights faster*

Q8: Virksomheder skal kunne drages til ansvar for, om deres udenlandske underleverandører i Danmark overholder danske regler om løn, moms og skat

Q8: Companies should be held response if their foreign subcontractors in Denmark do not comply with Danish rules on salary and taxes.

*Q9: Vækst i den offentlige sektor er vigtigere end skattelettelser

**Q9: Growth in the public sector is more important than tax reliefs.*

*Q10: Investeringer i kollektiv trafik skal prioriteres højere end investeringer til fordel for privatbilisme

**Q10: Investments in public transportation should have a higher priority than investments in private transportation*

*Q11: Straffen for grov vold og voldtægt skal skærpes

**Q11: The penalty for aggravated assault and rape should be higher*

*Q12:Kontanthjælpen skal sænkes, så den økonomiske gevinst ved at arbejde bliver større

**Q12: Unemployment benefits should be lower so the economic reward from working is higher.*

*Q13: Offentlige institutioner i Danmark tager for mange hensyn til religiøse minoriteter

**Q13: Public institutions in Denmark are too tolerant towards religious minorities*

Q14: Reglerne skal strammes, så det bliver sværere at få asyl i Danmark

Q14: The rules should be changed such that it becomes more difficult to be granted asylum

*Q15: EU bestemmer for meget i forhold til dansk lov

**Q15: The EU has too much power relative to Danish law.*

*Q16: Ulandsbistanden skal sænkes

**Q16: Public foreign aid should be reduced*

*Q17: Indsatsen for at forbedre miljøet skal gå forud for økonomisk vækst

**Q17: The effort to improve the environment is more important than economic growth.*

*Q18: Den offentlige kulturstøtte skal sænkes

**Q18: The government's financial support for culture should be reduced*

Q19: Huslejereguleringen skal ophæves

Q19: The rent regulation rule should be abolished

Q20: Kirke og stat skal adskilles

Q20: Church and state should be separated

*Issues for which district voter position data are available.

**daily transfers are a social security scheme for recent salary earners who are out of work due unemployment, sickness, pregnancy or having recently given birth.

Appendix D: Multilevel models

This appendix summarizes the MRP results from the 1st and 2nd stage. The first stage uses a multilevel model to estimate the relationship between issue positions and demographic categories. The results from each of those analyses are shown in Table D1-5. The second stage poststratifies the estimates according to the actual demographic composition in each district. The average district voter position is shown in Table D6.

Table D1: Random intercept variance for each variable in the multilevel regression stage: Pr(1)

Independent variable	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Vote choice	1.24	4.56	2.10	<.01	1.56	0.87	0.31	2.34	0.81	0.72
District	0.31	0.12	<.01	0.02	<.01	<.001	0.20	<.01	<.01	0.03
Education	0.12	0.17	<.01	<.01	0.04	0.14	<.01	0.40	<.01	0.12
Age	0.25	0.16	<.01	0.57	<.001	<.01	0.09	0.11	0.16	0.14
Gender	<.01	0.15	0.06	<.01	0.01	0.06	0.02	0.01	0.13	<.01

Table D2: Random intercept variance for each variable in the multilevel regression stage: Pr(2)

Independent variable	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Vote choice	0.93	0.59	0.67	1.31	0.31	1.18	0.36	0.62	0.34	0.10
District	<.01	0.05	<.01	<.01	<.01	0.02	<.01	<.01	<.01	0.03
Education	<.01	<.01	<.01	<.01	<.01	0.17	0.16	0.02	<.01	0.09
Age	0.08	<.01	.10	0.11	0.01	0.08	<.01	<.01	0.01	<.01
Gender	<.01	<.01	<.01	0.19	<.01	0.06	<.01	<.01	<.01	0.01

Table D3: Random intercept variance for each variable in the multilevel regression stage: Pr(3)

Independent variable	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Vote choice	0.14	0.04	0.18	0.20	0.02	0.17	0.24	0.24	0.07	0.04
District	<.01	<.01	<.01	<.01	<.01	<.01	<.01	0.06	<.01	<.01
Education	0.04	<.01	<.01	0.06	<.01	<.01	<.01	<.01	<.01	<.01
Age	0.16	0.01	<.01	0.08	0.03	0.01	0.06	<.01	<.01	<.01
Gender	<.01	0.02	<.01	0.04	0.01	<.01	<.01	<.01	<.01	<.01

Table D4: Random intercept variance for each variable in the multilevel regression stage: Pr(4)

Independent variable	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Vote choice	0.08	0.41	0.05	0.21	0.46	0.11	<.01	0.11	0.11	0.11
District	<.01	0.03	0.05	<.01	0.05	0.03	<.01	<.01	<.01	<.01
Education	<.01	<.01	<.01	0.03	<.01	<.01	<.01	<.01	<.01	0.05
Age	<.01	<.01	<.01	0.04	0.01	<.01	<.01	<.01	<.01	0.02
Gender	<.01	0.08	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

Table D5: Random intercept variance for each variable in the multilevel regression stage: Pr(5)

Independent variable	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Vote choice	1.11	1.70	1.60	0.53	1.10	0.77	0.68	2.07	1.22	0.29
District	0.02	<.01	0.25	<.01	0.14	0.06	<.01	<.01	0.06	<.01
Education	0.05	<.01	<.01	0.08	<.01	0.09	0.05	0.10	0.03	0.02
Age	0.57	0.05	0.07	0.20	0.01	<.01	<.01	0.03	0.04	0.03
Gender	<.01	0.01	0.02	0.03	0.05	<.01	<.01	<.01	<.01	<.01

Table D6: Mean district voter position

District	Q7	Q9	Q10	Q11	Q12	Q13	Q15	Q16	Q17	Q18
Bornholms Storkreds	3.98	3.19	3.39	4.25	2.97	3.72	3.70	3.48	3.27	3.32
Fyns Storkreds	4.00	3.13	3.21	4.22	2.71	3.73	3.71	3.60	3.19	3.32
Københavns Omegns Storkreds	3.71	3.21	3.79	4.19	2.97	3.56	3.68	3.51	3.38	3.32
Københavns Storkreds	3.87	3.22	3.89	3.97	2.84	3.29	3.59	2.99	3.58	3.19
Nordjyllands Storkreds	3.79	2.97	3.11	4.24	3.00	3.90	3.70	3.58	3.10	3.35
Nordsjællands Storkreds	3.75	2.98	3.48	4.23	3.07	3.79	3.66	3.40	3.28	3.33
Sjællands Storkreds	3.81	2.99	3.14	4.28	2.91	3.71	3.74	3.60	3.25	3.36
Sydjyllands Storkreds	3.81	2.91	2.99	4.31	3.14	3.85	3.78	3.78	3.10	4.41
Vestjyllands Storkreds	3.68	2.96	3.01	4.25	3.09	3.91	3.69	3.60	3.14	3.37
Østjyllands Storkreds	3.77	3.14	3.24	4.15	3.29	3.87	3.65	3.38	3.37	3.30

Appendix E: Ordered Logit Model

This appendix shows the results from a different model specification where we regress the MPs raw issue positions on their pre-parliamentary careers interacted with the party positions and the mean district voter positions, using ordered logit.[1] The results are consistent with those from the main paper. District mean voter positions are more weakly correlated with the positions of party civilians and (especially) party functionaries (p = 0.07) than with the positions of party locals. Party positions, on the other hand, are more strongly related to the positions of party functionaries and party civilians than to those of party locals.

Table E1: MPs positions, district voter positions, party positions, and pre-parliamentary careers

Parameter	Model 1d
Party civilian	1.21
	(1.39)
District mean voter position	0.99*
	(0.45)
Party civilian* District mean voter position	-0.61
	(0.43)
Party functionary	1.74
	(1.45)
Party functionary* District mean voter position	-0.80†
	(0.44)
Party position	1.70***
	(0.11)
Party civilian*Party position	0.32**
	(0.12)
Party functionary*party position	0.30*
	(0.12)
Seniority	-0.004
	(0.01)
Leader position	-0.12
	(0.08)
Age	-0.01*
	(0.01)
Cut point 1	5.00
	(0.154)
Cut point 2	6.92
	(1.54)
Cut point 3	8.80
	(1.55)
Cut point 4	10.76
	(1.56)
Random intercept variance: Issues	0.20
	(0.11)
Obs.	1,680

***p<0.001, **p<0.01, *p<0.05, †p<.1
Ordered logistic regression coefficients with standard errors in parentheses.
The omitted pre-parliamentary party career category is party locals.

[1] Unlike in the main model, we do not use random intercepts for MPs in the ordered logit model because there is no reason to suspect that certain MPs should be more or less likely to (dis)agree with issue statements in general.