

# When cartels split

Roll call votes and majority factional warfare  
in the Mexico City Assembly

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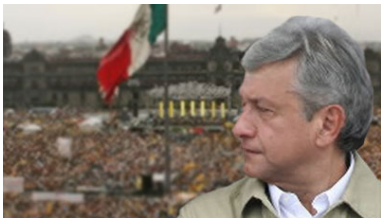
Study of Mexico City legislative assembly is opportunity to inspect **procedural cartel theory** (Cox&McCubbins 2005)

- ① where majority is deeply factionalized/polarized
- ② at sub-national level
- Policy matters: approved smoking ban, same-sex civil unions, euthanasia, legalized abortion
- Roll call voting 2006–09 (4<sup>th</sup> legislature)

40 members elected FPTP, 26 by PR

	1st 1997–2000	2nd 2000–03	3rd 2003–06	4th <b>2006–09</b>	5th 2009–12
<b>PRD</b>	<b>58</b>	29	<b>56</b>	<b>52</b>	<b>52</b>
PAN	17	26	24	26	23
PRI	17	24	11	6	12
PT	–	–	–	–	8
PVEM	6	12	8	5	5
PASD	–	5	–	–	–
PANAL	–	–	–	6	–
Independent	3	5	2	6	2
Total	100	100	100	100	100

# Anatomy of a split



The sore loser



Leading clique *Los Chuchos*



The Mayor

Legislative institutions mitigate collective dilemmas by creating inequality (cf. Weingast&Marshall 1988)

Cox&McCubbins:

- ① Majority seizes all offices endowed with agenda power
- ② Two types of agenda power
  - *positive*, proposal rights — conditional
  - *negative*, veto power — unconditional

**Expectation:**

majority remains united in floor  
*even if deeply divided*

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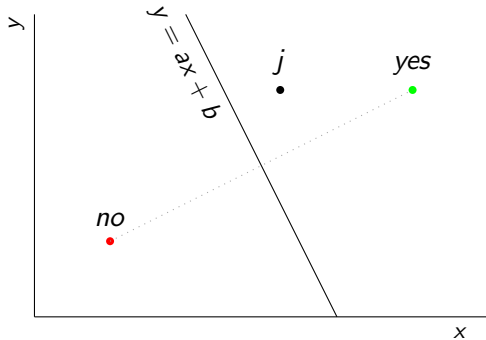
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2006–09: 521 roll call votes in floor, 175 contested (34 %)

	PRD majority	PAN	PRI	PANAL	PVEM	N
<b>Rice scores</b>						
All votes	.94	.99	.99	.99	.99	521
Contested votes only	.83	.98	.99	.96	.98	175
Minority vote >10 %	.84	.98	1	.95	.98	137
<b>Roll rates</b>						
All votes	2	10	10	8	24	521
Contested votes only	6	29	21	23	33	175
Minority vote >10 %	9	41	26	26	38	137
<b>&gt;40 % voted nay yet bill passed</b>						
All votes	4	10	–	–	–	521
Contested votes only	13	29	–	–	–	175
Minority vote >10 %	18	41	–	–	–	137

Abstentions and absences treated as missing values.

# Spatial voting theory





Vote propensity:  $v_j^* = \delta(ax_j + b - y_j) + \text{error}$

Sincere voting:  $v_j = \begin{cases} 1 \text{ ('yes')} & \iff v_j^* \geq 0 \\ 0 \text{ ('no')} & \text{otherwise} \end{cases}$

Dynamic:  $\theta_{j,t} = \begin{bmatrix} x_{j,t} \\ y_{j,t} \end{bmatrix} \sim N(\theta_{j,t-1}, \text{slack})$

Bayesian estimation via MCMC simulation

- 1 Extend Martin&Quinn (2002) to 2-D
- 2 Show that BUGS can estimate this

# Meaning of recovered ideal points

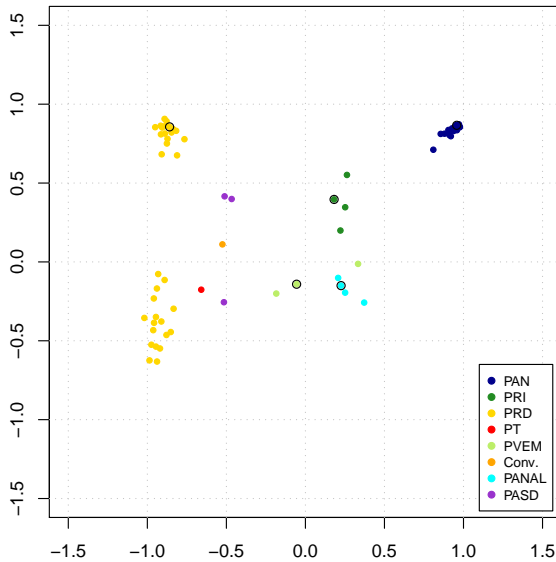
Fixed parameters  $\delta$  and  $a$  for 4 items  
to convey meaning to spatial coordinates



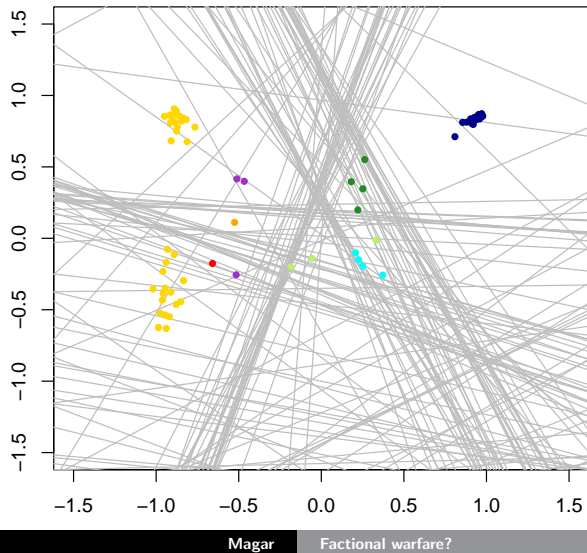
# Meaning of recovered ideal points

Date	Issue voted	Cleavage line	Aye vote pulls ideal point towards
Nov. 9, 2006	Same-sex civil unions	vertical	west
Dec. 26, 2006	Appointment of 5 new electoral magistrates	horizontal	south
Dec. 28, 2006	Lower debt ceiling for city budget for FY2007	vertical	east
May 29, 2008	Confirmation of city's electoral board	horizontal	south

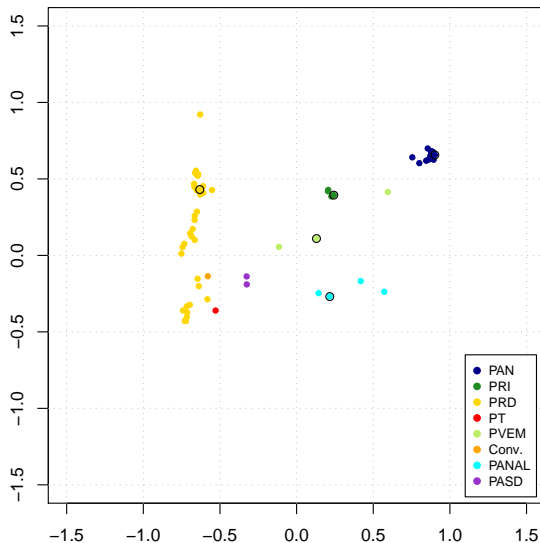
# Static estimation 2006–09



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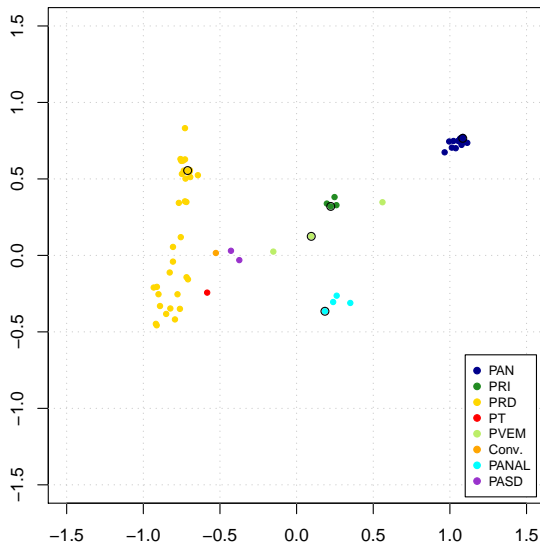


# Dynamic model ( $t = 1$ )



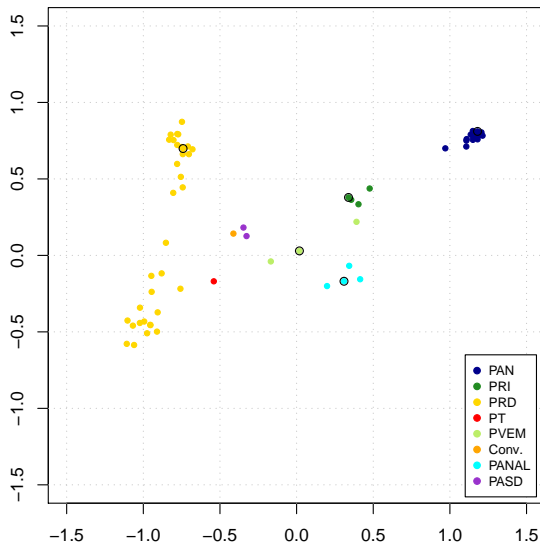
2006	→	3
2007	—	1
	—	2
	—	3
2008	—	1
	—	2
	—	3
2009	—	1

# Dynamic model ( $t = 2$ )



2006	—	3
2007	→	1
	—	2
	—	3
2008	—	1
	—	2
	—	3
2009	—	1

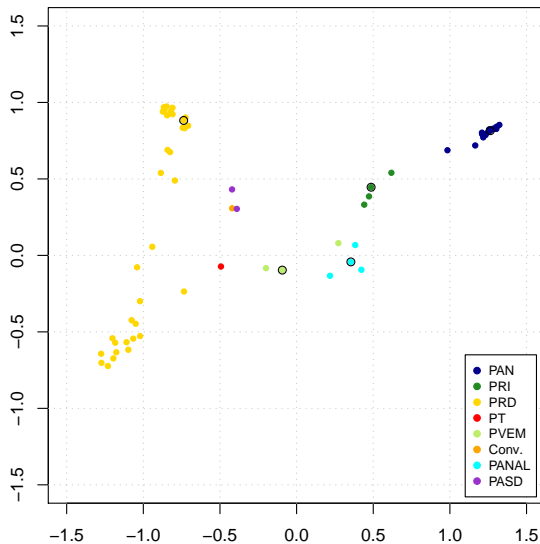
# Dynamic model $(t = 3)$



2006	—	3
2007	—	1
	→	2
2008	—	3
	—	1
	—	2
	—	3
2009	—	1

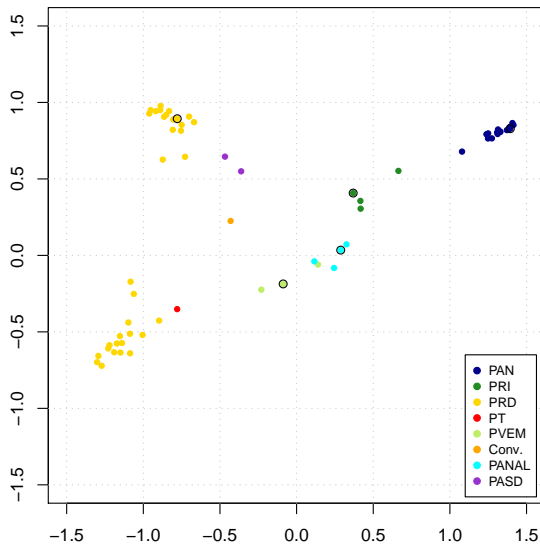


# Dynamic model $(t = 4)$



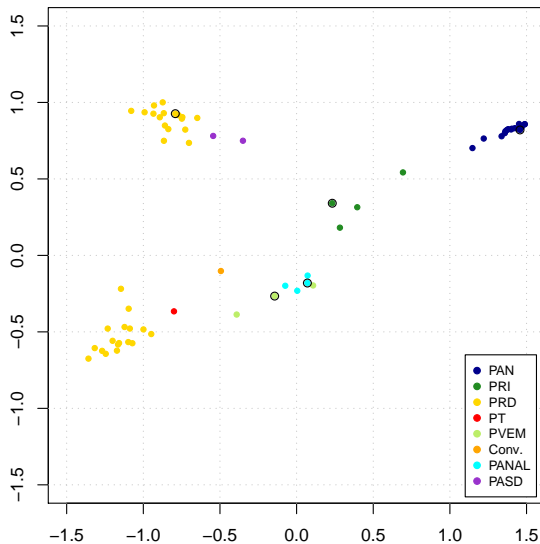
2006	—	3
2007	—	1
	—	2
2008	→	3
	—	1
	—	2
	—	3
2009	—	1

# Dynamic model ( $t = 5$ )



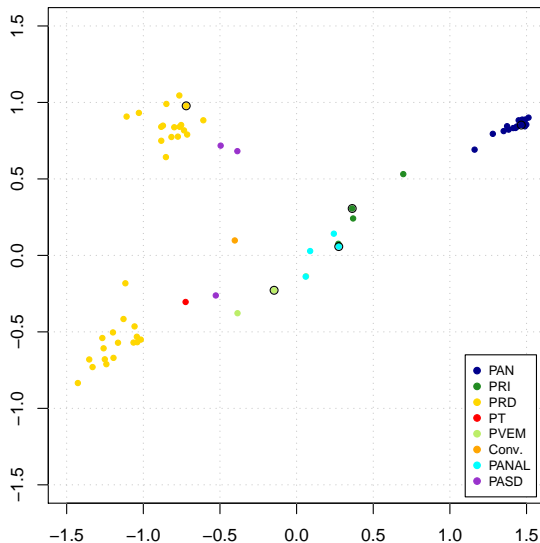
2006	—	3
2007	—	1
	—	2
	—	3
2008	→	1
	—	2
	—	3
2009	—	1

# Dynamic model ( $t = 6$ )



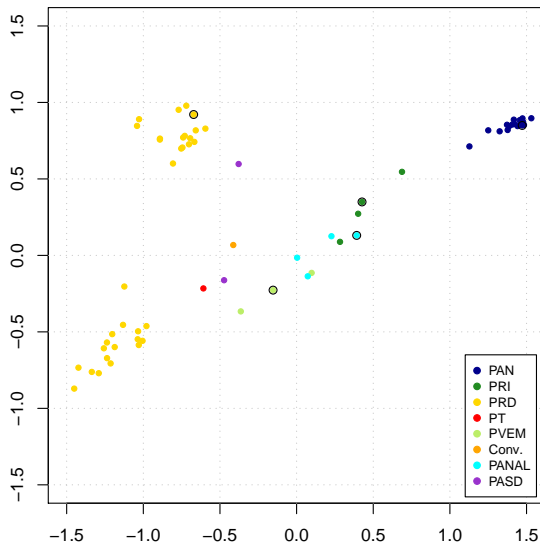
2006	—	3
2007	—	1
	—	2
2008	—	3
	—	1
	→	2
	—	3
2009	—	1

# Dynamic model $(t = 7)$



2006	—	3
2007	—	1
	—	2
2008	—	3
	—	1
	—	2
	→	3
2009	—	1

# Dynamic model ( $t = 8$ )



2006	—	3
2007	—	1
	—	2
2008	—	3
	—	1
	—	2
	—	3
2009	→	1

Preliminary analysis reveals that:

- ➊ Majority united in left–right axis, but split consistently over “confirmations”
- ➋ 4<sup>th</sup> legislature exceptional? Routine?
- ➌ 2006 fiasco may explain
- ➍ Verify studying other legislatures
- ➎ Check Bonica’s work

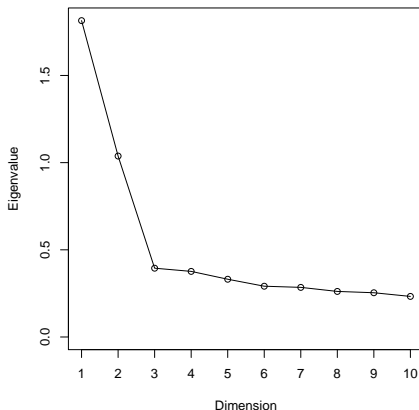
Thank you!

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**Thank you!**

# Bi-dimensionality



Eigenvalues of the double-centered agreement score matrix for 4th legislature drop fairly smoothly from the third value onwards, an indication that the data are most likely two-dimensional. Abstentions and absences coded as nays for this computation.