

# Can Voters Be Equal?



## A Cross-National Analysis

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(abstract)

The paper empirically tests the proposition that because of the unequal social distribution of politically relevant resources, some groups of citizens may be less successful in expressing their specifically political preferences in the vote than others. Hence, the electoral arena may give different people different degrees of political influence even when the formal equality of all citizens before the law is rigorously upheld in the electoral process. Survey data on voting behavior from the Comparative Study of Electoral Systems and Larry Bartels's (1996) simulation procedure - now extended to the analysis of multiparty-systems and non-linear information effects on the vote - are utilized to explore the question. The results show that social differences in political knowledge may lead to the hypothesized political inequalities but their size is remarkably modest.

# Where to find the paper?

“Can Voters be Equal? A Cross-National Analysis. Parts 1-2.”  
Forthcoming in *The Review of Sociology*, see link at  
[http://www.personal.ceu.hu/Gabor\\_Toka/Papers.htm](http://www.personal.ceu.hu/Gabor_Toka/Papers.htm)

A longer version appeared as:

"Voter Inequality, Turnout and Information Effects in a Cross-National Perspective." Helen Kellogg Institute Working Paper Series No. 297. Notre Dame, IN: The Helen Kellogg Institute for International Studies at the University of Notre Dame. URL: <http://www.nd.edu/~kellogg/WPS/297.pdf>

# Knowledge varies across social groups

**Table 1: Some Determinants of Electoral Participation and Political Information Level in Pooled Cross-national CSES Data**

<i>Dependent Variable:</i>	<i>Voting</i>		<i>Info</i>		<i>Beta</i>
	<i>B</i>	<i>s. e.</i>	<i>B</i>	<i>s. e.</i>	
Age/10	.287**	(.014)	.012**	(.001)	.132
ABS(Age-45)/10	-.207**	(.026)	-.009**	(.001)	-.054
Female	-.137*	(.046)	-.049**	(.002)	-.166
Education Low	-.355**	(.053)	-.040**	(.003)	-.136
Education High	.358**	(.079)	.034**	(.003)	.082
Rural Residence	.105*	(.056)	-.007*	(.003)	-.019
Farm Job	-.092	(.114)	-.025**	(.006)	-.035
Manual Work	-.131*	(.054)	-.014**	(.003)	-.042
Income	.159**	(.020)	.010**	(.001)	.083
Religiosity	.551**	(.060)	.006*	(.003)	.015
Race	-.246*	(.116)	-.050**	(.007)	-.055
Turnout-Mean	.074**	(.002)	—	—	—
Info-Mean	—		-.172	(.197)	-.006
Constant	-5.648**	(.223)	.561**	(.098)	
Nagelkerke R <sup>2</sup>	.184		—		
Adjusted R <sup>2</sup>	—		.100		

# The hypothesis



The unequal social distribution of politically relevant resources (like practical political knowledge) make some groups of citizens less successful than others in expressing their specifically political preferences in the vote.

Hence, the electoral arena may give different people different degrees of political influence even when the formal equality of all citizens before the law is rigorously upheld in the electoral process, and everyone votes.

Question: to what extent this is true?

# Note that this only holds if:

- (1) Voters are rational
- (2.a) Voting behavior is at least partly instrumental (i.e. motivated by the desire to influence the outcome); or (2.b) instrumental voting behavior converge with expressive voting behavior (at least among knowledgeable voters)
- (3) Rival information-providers (like political parties, media outlets, etc.) make sure that the marginal impact of one unit extra information on vote choice diminishes as knowledge level increases
- (4) Elections matter for political outcomes

# A normative objection to the hypothesis

Political ignorance results from individual choices for which the consequently underrepresented individuals must remain responsible. Their knowledge level itself is an expression of preferences.

BUT: The rationality of ignorance and abstention does not protect citizens from the consequences of collective abstention and ignorance. Rather, it make these consequences even more likely to emerge.

# A theoretical objection to the hypothesis

Cues help out voters, who anyway have a rather simple choice set. The number of party alternatives is low, and the information environment rich in shortcuts because of intense and balanced political competition.

BUT: it remains to be seen empirically to what extent this reduces knowledge-based voter inequalities. Bartels (1996) suggests that there may still be a big gap between observed and fully informed voting behavior.





# Three ways of testing the hypothesis

1. Experimental design (e.g. deliberative polls and Lau and Redlawsk 1997; McKelvey and Ordeshook 1990)
2. Formal modeling (e.g. McKelvey and Ordeshook 1985)
3. Simulation procedures (e.g. Delli Carpini and Keeter 1996, Bartels 1996, Althaus 1998)

# A Bartels-type vote function

Step 1: Model vote choice as a function of interactions between political information level and socio-demographic variables:

Vote Choice =  $fn$  (Knowledge,  
Gender\*(1-Knowledge), Gender\*Knowledge,  
Age\*(1-Knowledge), Age\*Knowledge,  
ABS(Age-45)\*(1-Knowledge), ABS(Age-45)\*Knowledge,  
Education\*(1-Knowledge), Education\*Knowledge,  
Farming\*(1-Knowledge), Farming\* Knowledge,  
Manual Worker\*(1-Knowledge), Manual Worker\*Knowledge,  
Religiosity\*(1-Knowledge), Religiosity\*Knowledge,  
Race\*(1-Knowledge), Race\*Knowledge,  
Ethnicity\*(1-Knowledge), Ethnicity\*Knowledge,  
Income\*(1-Knowledge), Income\*Knowledge)

# What this function is equivalent to:

Vote Choice= $f_n$  (Knowledge,  
Gender, Gender\*Knowledge,  
Age, Age\*Knowledge,  
ABS(Age-45), ABS(Age-45)\*Knowledge,  
Education, Education\*Knowledge,  
Farming, Farming\* Knowledge,  
Manual Worker, Manual Worker\*Knowledge,  
Religiosity, Religiosity\*Knowledge,  
Race, Race\*Knowledge,  
Ethnicity, Ethnicity\*Knowledge,  
Income, Income\*Knowledge)



# Why use socio-demographic variables only?

Bartels' answer: because attitudes may change themselves as information level increases.

My answer: because these are the only variables that influence both vote choice and political information level across a large number of elections.

# Bartels' simulation procedure

- Step 2: Use the respondents' true socio-demographic characteristics and the parameter estimates from the vote function to estimate the probability that respondents  $i$  vote for each party  $j$  at the actually observed values of the *Knowledge* variable (falling somewhere between 0 and 1), and in the hypothetical situation when the respondents' observed information level is replaced with  $Knowledge=1$ .
- Step 3: Derive fully informed votes from the estimated probabilities.
- Step 4: Sum up the difference between simulated (fully informed) and observed votes to determine (A) how many individuals would have voted differently if they had become fully informed and (B) how much the election results would have changed.

# What is wrong in Bartels' analysis?

Inferences are made about particular elections in history using a highly counter-factual simulation. In the real world, if such a sea change occurred in citizens' information level, then parties/candidate would surely adjust their behavior in ways that are hard to anticipate.

Inferences are made about the percentage of individuals who would change their vote if they became fully informed. This is wrong because these estimates (A) assume that the vote function perfectly modeled vote choices and (B) are dependent on the arbitrary selection of what full information level is.

# What one can do instead

Steps 1 and 2: Use the same vote function and estimate the probability that respondents  $i$  vote for each party  $j$  at the actually observed values of the *Knowledge* variable (falling somewhere between 0 and 1), and in the hypothetical situation when the respondents' observed information level is replaced with  $Knowledge=1$

Step 3: Derive fully informed election outcomes from the estimated probabilities: the one that would obtain (A) if *Knowledge* remained unchanged; and the one that would obtain (B) if everyone's *Knowledge* raised to various hypothetical values but everything else remained the same.

Note that this only assumes that the vote function included all shared determinants of vote choice and *Knowledge*.

# Estimating voter inequality

- Step 4: Derive these estimates for various (in my analysis 90) socio-demographic groups (defined, in my analysis, in terms of gender, age, education and income).
- Step 5: Use the Pedersen-index ( $\sum v_i - \hat{v}_i$ ) to calculate the difference between simulated (fully informed) and observed election outcomes in these social groups.
- Step 6: Regress the information-induced change at the group level (observed across a wide range of elections) on the observed mean of *Knowledge* in the group.



# The results at the national level

Table 2: Estimated Percentage Change in Election Outcome Under Different Hypothetical Scenarios of Change in Voters' Information Level

Presumed information level	1 for everyone	at least .65
Australia 1996	21.1	5.3
Czech Republic 1996	16.5	3.6
Germany (West) 1998	9.7	1.4
Germany (East) 1998	8.1	4.9
Hungary 1998	21.3	5.8
Japan 1996	39.8	12.1
Mexico 1997	14.3	1.1
The Netherlands 1998	15.7	5.1
New Zealand 1996	14.5	5.8
Norway 1997	14.2	3.3
Poland 1997	26.3	10.3
Romania 1996	18.3	4.9
Spain 1996	11.9	4.3
Taiwan 1996	20.8	7.7
USA 1996	9.4	3.1
Ukraine 1998	19.3	5.5
UK (England & Wales) 1997	16.8	2.5
UK (Scotland) 1997	9.2	2.0

# The results at the group level

Under the first scenario, the difference between fully informed and actual vote distributions tends to be about 3 percent bigger in a socio-demographic group that, on average, is one standard deviation below the national mean on political information level than in a sociodemographic group approximating the national average on the latter variable.

Under the second scenario, the same gap is above 7 percent.

# Conclusions



Elections may be remarkably neutral institutions in aggregating the preferences of all groups of citizens in a highly egalitarian way.

Yet, the gap between observed election results and those that may obtain in a fully informed electorate are rather large.

Elections, then, seem to be a little bit like Russian roulette: they are not terribly reliable guides to the underlying political preferences among citizens, but they do not necessarily treat some social groups much more favorably than others.