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CAN VOTERS BE EQUAL? A CROSS-NATIONAL ANALYSIS* Part 1

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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. The first part of the paper explores the assumptions behind the proposition itself and the further assumptions that need to be made in orther to test it empirically. The second part of the paper (forthcomming in the next issue of this periodical) offers an empirical test. Survey data on voting behavior in 18 democratic party systems from the Comparative Study of Electoral Systems and Larry Bartels' (1996) simulation procedure – now extended to the analysis of multiparty-systems, turnout effects and non-linear information effects on the vote – are utilized to explore the question. The results show that social differences in both turnout and political knowledge may lead to the hypothesized political inequalities but their size is remarkably modest.

Keywords: electoral behavior, level of information, turnout effects

The starting point of this paper is simple and familiar. Because of the unequal social distribution of politically relevant resources, some groups of citizens may be 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. The key question examined here is to what extent this proposition is correct.

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The first part of the paper discusses some conceptual issues and the assumptions that have to be made in order to make the problem empirically tractable at all. The second part, forthcoming in the next issue of the journal, presents some empirical analyses that aim to assess the potential electoral relevance of the political inequalities that may result from the trivial fact that some voters are far more likely to vote and/or be knowledgeable than others. I rely on a method independently proposed by Bartels (1996) and Delli Carpini and Keeter (1996). Both studies tried to compare observed and computer-simulated "fully informed" preferences among citizens, but it is the first that is directly relevant for my purposes, since it considered information effects on votes, rather than on survey responses to attitude questions.

As I will argue in the first part of the paper, the method is not really suitable for some of the purposes it was used for in Bartels's pioneering study. However, it can be used to evaluate whether some groups of citizens are better represented than others through the electoral arena. In the second part of the paper I offer an extension of the original simulation procedure to multiparty systems, nonlinear information effects, and – following the suggestion of Bartels himself – electoral participation. All empirical analyses reported in the paper are based on the pooled cross-national data from the June 2000 version of the Comparative Study of Electoral Systems (CSES) Integrated Micro Data Set.[1] Regarding the construction and coding of variables, the exclusion, inclusion and weighting of cases in the analysis, the reader is referred to the appendices.

The results of the data analysis suggest that elections may, after all, be remarkably neutral institutions in aggregating the preferences of all groups of citizens in a highly egalitarian way. The systematic voter inequalities anticipated above seem to exist, but their impact on election results is rather small. Yet, this is not to say that elections faithfully transform "the will of the people" into vote distributions. The gap between observed election results and those that may obtain in a fully informed electorate are, in fact, considerable. Overall, then, elections are 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 more favorably than others.

THE CONCEPT OF VOTER INEQUALITY

Citizens' equality is, of course, a central component of the notion of democracy. Ordinary citizens probably often mistake simple majority rule for democracy – but majority rule itself derives its powerful normative appeal from the fact that it allows

1 The data are made available through the website of the American National Election Study at <*http://www.umich.edu/~nes/cses/*>, Ann Arbor, MI: University of Michigan, Center for Political Studies [producer and distributor], 1995–1999. The data collection was supported by many different organizations around the world. The CSES Secretariat is supported by the National Science Foundation under Grant Nos: SBR-9317631 and SES-9977967. Any errors of data handling and interpretation are mine.

each voter to have an equal influence on the outcome.[2] Citizens are always unequal in their motivation and opportunities to engage in political activity as well as in the resources they can mobilize while pursuing political goals. Yet, apparently all contemporary definitions of democracy reserve the term for political systems where the equality of citizens is the norm in national elections.[3]

Below I examine the possibility that the *de jure* equality of the voters does not guarantee their *de facto* equality even in the most narrowly understood electoral arena. I try to quantify, as much as possible, the extent to which this may be the case. Of course, an empirical analysis of the question must be designed in such a way so as to allow the disconfirmation of the hypothesis, too, i.e., to demonstrate the unrivalled political neutrality of electoral procedures – provided that they really are neutral. Such a negative finding would put democratic theory on a much firmer ground than it is today when voter equality is too often assumed to automatically follow from general franchise.

Explicitly or by implication, the scholarly literature on voting points at many possible sources for political inequalities (see e.g. Althaus 1996; Bartels 1998; Delli Carpini and Keeter 1996: 6; Downs 1957: 91, 94, 235, 252–56, 263–66, 273; Hill and Leighley 1992; Lijphart 1997; Moore 1987; Norpoth and Buchanan 1992; Pacek and Radcliff 1994; Rosenstone and Hansen 1993; Verba and Nie 1972: 309–18). This paper only considers two of them: those that may derive from the socially unequal distribution of two aspects of political involvement: electoral participation and political knowledge. For the sake of brevity, I shall call them turnout-based and knowledge-based voter inequalities, respectively. Although the first received far more attention in the empirical literature on political involvement, the second seems equally plausible for some theorists. Anthony Downs, for instance, asserted that "systematic variations [among voters] in amount of free information received and ability to assimilate may strongly influence the distribution of political power in a democracy".[4] Indeed, empirical studies suggest that mere uncertainty about the true traits of candidates may make citizens not vote at all or vote for other parties/candidates than the one probably closest to their ideal point in the space of relevant policy dimensions (see Alvarez 1997; Bartels 1986; Palfrey and Poole 1987). It seems logically to follow that the electoral behavior of the least informed conveys less information about their political preferences than that of the better informed.

2 See Riker 1982. This is not to say that majority rule is always the best means of guaranteeing citizens' political equality. Majority rule, however, is impossible to justify in normative terms without a reference to the egalitarian ideal.

3 See Collier and Levitsky (1997). The major contemporary exception is also telling about the importance of citizens' equality in the electoral arena. When Przeworski (1991: 11–4) omits the equality requirement from his definition of democracy, he justifies this with the argument that free electoral competition for political power leads to the introduction of general franchise more or less automatically – an inference that he himself admits was contradicted by the long reign of the apartheid regime in South Africa.

4 Downs (1957: 223). Similar remarks abound in the literature, e.g. "information and transaction costs [...] introduce class bias into the electoral system, so that those who are on top in terms of wealth and other resources also come out on top in terms of political influence" (Page 1978: 190). See also Delli Carpini and Keeter (1996: 6); Donohue, Tichenor and Olien (1975), and Moore (1987).

Innocent as this last inference may sound, the notion of knowledge-based voter inequality inevitably implies that certain contestable assumptions do hold. Taken together these three assumptions amount to saying that knowledge, in some ways, does mean power. Firstly, any talk of voter inequality would be obviously meaningless if elections were irrelevant for political outcomes. Rather, a degree of positive responsiveness to the perceived wishes of the electorate seems to be assumed on the part of power-holders. Secondly, knowledge-based voter inequalities can exist only if differences in knowledge may cause systematic differences in vote choices even if preferences remain the same.[5] This seems to be the reverse side of saying that some kind of first-order preferences precede choices, and that with identical first-order preferences, identical information, and the same cost of decision making, anyone would consistently arrive at the same transitive ordering of the alternatives in any given choice set.

Thirdly, the concept of voter inequality carries the assumption that the political consequences of the vote loom large on the mind of voters – or at least of fully informed voters – when they cast their vote. If fully informed votes do not signal preferences regarding political outcomes, information and turnout differences between groups of voters could hardly generate unequal influence over the latter. Thus the concept of voter inequality raises the problem of expressively versus instrumentally rational behavior.

In the more conventional instrumental models of voting, commonly associated with the Downsian legacy, voters are interested in the political consequences of election outcomes: especially in government policies and performance. In the expressive model, the benefit of voting for the individual citizen derives solely from the intrinsic reward of casting a vote for a particular party or candidate (see especially Brennan and Hamlin 1998; Schuessler 2000). The reference point for any concept of voter inequality must be citizens' influence on political outcomes, that is to say, the extent to which vote choices correspond to fully informed and instrumentally rational behavior. Empirically, however, voting behavior may well be motivated by its intrinsic rewards. However, the gap between instrumentally and expressively rational voting behaviors is likely to decrease as one's information level increases. This is so because it is highly plausible that the voters' expressive benefits from a particular course of action are reduced by the knowledge that it may – to the infinitesimal extent that a single vote matters at all – go against the election outcome that they, given their preferences, would most like to see. Unlike the previous assumptions mentioned above, the convergence between expressive and instrumental voting behavior is not a necessary assumption behind the concept of voter inequality. However, if it does not hold, i.e. if fully informed vote choices have little to do with fully informed and instrumentally rational choices, then voter inequalities will still exist, but their

5 For all practical purposes, this paper treats preferences as given. Some may want to counter that some initial preferences may be subject to change under the impact of new information about their incompatibility with other, more strongly felt preferences. However, in the present context, this phenomenon can be conveniently lumped together with the impact of information on the 'objective' congruence between preferences and choice. After all, vote choice can be seen as a derived preference that may be revised when new information reveals its conflict with some other preferences.

practical significance is vastly reduced. Then, they would only mean that inequalities of turnout and knowledge translate into an unequal probability of enjoying the expressive benefits of voting (and of voting as if one were fully informed).

Fourthly, systematic knowledge-based inequalities between more and less informed groups of citizens can only exist if the marginal impact of one unit extra information on vote choice diminishes as the starting level of information increases. Indeed, some of the most important recent studies of information effects on the vote make the plausible assumption that the greater the voters' stock of previous information, the lesser the probability that any new information can change their vote (Alvarez 1997; Zaller 1992). Yet this assumption may not hold just about anywhere. Even the very opposite could be the case if some antidemocratic mechanisms – like brutal censorship of the press – assured that specific pieces of information become widely available in an inverse proportion to their ability to affect electoral choices. Then, one unit of new information reaching the least informed would be unlikely to include anything – say juicy details of a recent scandal – that would instantly alter vote decisions. One unit of new information reaching the highly informed would then be more likely to have relevant consequences on voting behavior. If so, then one unit increase in information level would have an ever-increasing impact on voting behavior as we move up on the knowledge-ladder in society.

Thus the fourth assumption behind the concept of knowledge-based voter inequality is that some arrangements – like freedom of speech and vigorous competition for public office in a democratic framework – guarantee that a variety of rival actors make most widely available and easily accessible exactly those pieces of information that are expected to influence voting behavior most. If they get their messages through, then out of any two groups that are both entirely homogeneous in terms of their first-order preferences and general level of political information, the one with higher general level of knowledge is likely to be less susceptible to random variations in the exact composition of individual group members' stock of information. Thus, electoral choices in the highly informed group will speak more clearly about their underlying preferences than the choices of the less informed group. In other words, the more informed group will be more likely to vote the way it would if it were fully informed.

Indeed, it is hardly implausible that poorly informed voters have difficulties in expressing their views clearly – just think of the arguments about how an odd paper ballot in the 2000 US presidential election had probably made some in Florida vote for someone else than whom they really wanted. Yet the assumption must hold. We sense voter inequality in the Florida example exactly because it seems believable that the same amount of extra information about the ballot – say the new impressions one could obtain by scrutinizing the ballot paper for one second longer – would have made less difference in the vote choice marked on the paper by highly informed voters than in the choices marked by their poorly informed counterparts.

When assumptions two, three and four all hold, rising level of information among voters should usually increase the valid information that vote choices convey about the voters' underlying preferences regarding political outcomes to an observer lacking extensive information about the composition of each voter's stock of knowledge. Of

course, neither politicians nor other observers can possibly discount the effect of all the misinformation and misunderstanding that can influence votes. The less such observers can read into votes, the less likely contenders for elected office respond to popular preferences in the order of their true incidence in – and salience for – the electorate. In other words, we can assume that more knowledge facilitates a better use of the vote by citizens – the meaning of "better" being defined here by the democratic ideal that elected officials should be responsive and accountable to citizens' preferences. Similarly, voting for a particular party or candidate will normally carry more information about a voter's preferences than nonvoting, and thus give more political influence to a given citizen.[6] Hence the possible conflict between the democratic ideal on the one hand, and social inequalities in the distribution of turnout and political knowledge on the other.

The validity of the four assumptions is, of course, a matter of degree. The first and fourth assumptions should, to some extent, hold in any genuinely democratic countries, and the second assumption is merely the standard conception of rationality, be it expressive or instrumental. The third assumption is contestable, but both empirical evidence and theoretical argument can support it (see Tóka 2002). At any rate, I will not test these assumptions any further – it suffices to note that they underline any talk of voter inequality.

I would like to stress two characteristics by using this latter expression to denote a certain subtype of those numerous situations when some preferences have less than their fair weight in the election outcome under the 'one person-one vote' rule. First, the concept of voter inequality stresses that this is an inequality between voters, i.e. with roots in the voters themselves, rather than in the characteristics of the candidates and the parties, like an unequal distribution of campaign funds between the latter.[7]

Secondly, talking of inequality implies that the root of the phenomenon is not simply the unequal intensity of political preferences or commitment among citizens. If unequal commitment were to explain, for instance, different rates of turnout across social groups, then we could argue that the election outcome faithfully reflected the "real" – i.e. intensity-weighted – distribution of preferences in the electorate exactly because turnout was unequal across groups. Unequal turnout would not then give

6 Of course, beyond a certain point, further information may not significantly improve the information content of their vote. Increasing decision-making costs may counterbalance the beneficial impact of more information, and more information also means a greater probability of possessing at least some potentially misleading information. Yet, given the typical information level in mass electorates – succinctly characterized by Converse (1990, 2000) as a variable with a low mean and very high standard deviation –, more information must usually give voters greater influence on their representatives via the electoral arena.

7 Note again that many political inequalities postulated in the previous literature fall outside of my definition. For instance, some argue that damage is done to the political influence of low-turnout groups already by the fact that politicians anticipate their low turnout and therefore neglect their supposed interests (Verba et al. 1993: 304). However, if their entry in the electorate would not alter the vote shares of the existing alternatives, then such a limitation of political influence would not be caused by the social inequality of participation *per se*. Rather, the reason is the prevalence of some beliefs among politicians about the electoral significance and likely reactions of these groups and the entry costs faced by new challengers. These beliefs may be right or wrong. The political consequences they generate simply do not belong specifically to the voter inequalities that this paper addresses. The latter are impossible to imagine without some change in election outcomes (provided the alternatives remain exactly the same) when the inequalities in question disappear.

disproportional political influence to some groups at the expense of others – quite the contrary –, and hence we would not talk of specifically political inequalities. Clearly, voter inequalities should mean persistent features of the electoral process that are at odds with the "one person – one vote" principle.

There are at least two reasons why unequal turnout and unequal knowledge can produce such outcomes. Groups with divergent preferences are bound to vote – and to vote as if they were fully informed – at different rates, and will do so for reasons totally unrelated to the intensity of their preferences if either cognitive capabilities to deal with political information or the motivation for political involvement are unequally distributed between them. Because of the reasons discussed in the literature on information shortcuts (see below), unequal cognitive capabilities may well be the lesser of these two problems. Unequal motivation, however, seems to be inherent in the electoral process because of the notorious incentive problem commonly labeled as the paradox of voting. Democracy requires that, at least at some critical junctures, many can participate in political decisions. But if many participate, then the impact of a single vote on the outcome is negligible. Hence, the specifically political benefit of voting becomes unable to motivate citizens' participation, since the cost of voting – albeit tiny – easily exceeds it. Therefore, electoral participation, at least partially, is driven by other factors than the intensity of preferences regarding election outcomes. The most likely motives seem to be a sense of citizen duty, and various pleasures that may stem from the act of voting itself.[8] Whatever social mechanisms generate a sense of citizen duty or a thrill of entertainment from electoral participation, the groups that appreciate them best are bound to have an advantage over the others in the electoral arena. Unlike unequal influence generated by differences in the intensity of preferences or a low turnout among the supporters of a party caused by disillusionment and second thoughts among its supporters, this advantage is inevitably at odds with the notion of citizens' equality.

Obviously, the same argument applies for citizens' political information level. The minuscule impact of their own vote on the outcome cannot be the sole reason why rational citizens attend to any political information. Thus, political information level is likely to reflect other factors than the intensity of political preferences or the strength of commitment. If it is distributed unequally across social groups, then it can be a further source of voter inequality – provided that it influences people's capacity to vote as *if they were fully informed,* i.e. getting as close as possible to how they would vote if they had perfect knowledge and their decision-making costs were zero. Therefore, both turnout- and knowledge-based voter inequalities are rooted in the same incentive problem, and their existence may well be an ineradicable feature of democracy. But are these inequalities truly relevant?

OBJECTIONS

The relevance of voter inequality can be questioned with both normative and empirical arguments. One may want to argue that nonvoting (and possibly also

8 Regarding the counter-arguments and their inadequacy, see especially the reviews of Blais (2000: 5ff) and Mueller (1989: 348–69).

political ignorance) results from individual choices for which the consequently underrepresented individuals must remain responsible. Yet talking about individual responsibility is misleading in this context. Since election results influence collective outcomes, the potential victims of the political inequality stemming from the socially unequal distribution of turnout and relevant knowledge are not the poorly informed voters and the nonvoters as such. Rather, the victims are all who, irrespective of their own political information level and participation, share their underlying political preferences with nonvoters rather than voters, and with uninformed, rather than knowledgeable voters. No matter how they personally vote, and whether they vote at all, their preferences may have a weaker expression in the election outcome than the numerical presence of these preferences in the electorate would justify under the 'one person – one vote' rule. Thus the moralistic argument about the supposedly self-inflicted nature of voter inequalities does not seem to hold much water.

Turning now to empirical objections, note that there may be considerable cross-national and cross-time variations in knowledge gaps and turnout differences between different groups. Some turnout differences may even cancel out the political effect of some knowledge gaps. For instance, as *Table 1* demonstrates, rural residents in contemporary democracies tend to show above-average turnout, but below-average political information level.

Table 1. Logistic regression of electoral participation and ols-regression of political information level on socio-demographic variables in the pooled cross-national CSES data

Dependent Variable					
	Voting		**Info**		
	B	s. e.	B	s. e.	beta
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
Devout	.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^2	.184		—		
Adjusted R^2	—		.100		

Notes: Table entries are regression coefficients (with standard errors in parentheses). On data source, weighting and variable coding see the appendices. The data are weighted to correct for cross-system differences in sample size and various sampling problems in some of the data sets. The weighted N in the analysis is 16616, and the unweighted *N* is 27401.
**Two-tailed significance < .01
*Two-tailed significance < .10

Yet, the same table makes it clear that social groups with low turnout also tend to be less informed than the average. Furthermore, cross-national differences in, for instance, gender effects on political involvement (see Claibourn and Sapiro 2000) do not cancel out each other fully in the pooled data. Across a wide range of democracies, the young, the old, people whose income or education is low, women, racial minorities and some occupational groups tend to participate less in elections and know less about politics than other citizens. Socio-demographic traits may not go far in explaining voting behavior, but we certainly know about many ways that the electoral and policy preferences of the above groups may be special. Thus, in the abstract, one can easily imagine that election outcomes may be systematically different if the less involved members of these groups voted in greater numbers or their political knowledge increased.

There are, however, other, better reasons to doubt the seriousness of voter inequality. The institutional design of representative democracies aspires to make national elections relatively infrequent, and a channel for expressing citizens' preferences on an open-ended and potentially infinite variety of issues. These two factors assure, via various mechanisms, that even the most active and best-informed citizens can convey only very little information about their preferences through the vote.

First, turnout in national elections can come close to 100 percent – some argue that compulsory voting alone may make it so high that virtually no social inequalities remain in rates of participation (Verba et al. 1978; Lijphart 1997). Obviously, this is achieved partly by making elections infrequent. Second, open political competition should be able to guarantee that citizens live in an environment very nearly saturated with handy information shortcuts, mechanisms of delegation, and other ingenious devices that can empower even the least resourceful (see Lupia and McCubbins 1998). In contrast, the number of relevant party alternatives is usually limited, and hence, vastly simplifies the task of the voter. As a result, there may be a low ceiling beyond which extra knowledge may have diminishing or absolutely no effect on voting behavior (see Lupia 1994).

This property of the voting act was often noted by electoral researchers: "An individual facing a choice situation like voting, where the number of alternatives is limited, need only gather enough information to determine which alternative is preferable" (Popkin et al. 1976: 789). It is not only that, as Lau and Redlawsk's (1997) evidence seems to imply, most citizens may not be able to utilize any more information than what they already have. This would still leave the possibility open that differential cognitive capabilities transform into inequalities of politically relevant skills.[9] But if the choice-set is reasonably small, fairly small stocks of information may already

9 Lau and Redlawsk (1997) tried to simulate "correct" (i.e. fully informed) votes through experiments. The results suggested that receiving abundant candidate information does not make any difference in how citizens actually vote. Yet, it is not just the unavailability or high cost of information that can prevent citizens to process relevant information and behave as if they were fully informed. The absence of the cognitive styles, the contextual knowledge stored in long-term memory, and the self-confidence that normally comes with high information level may all have similar effects (Althaus 1998: 547). Hence, skepticism is warranted regarding experimental simulations of fully informed votes.

suffice for a voter to emulate fully informed behavior – without all the risks inherent in an information overload:

> "[B]y making up their minds in a different way, voters who are *not* well informed about politics – as well as those who are – may make approximately rational electoral choices." "[T]he poorly informed voter may lack the information to make the kind of choice the well-informed voter can, that is, a choice that turns on comparison of the candidates, for instance, with respect to their policy commitments. All the same, the poorly informed voter may have the information needed provided he or she treats the choice as a choice for or against the incumbent; poorly informed or not, the voter is in a position to judge if the incumbent's performance is satisfactory. ...So, in these alternative ways, the choices of voters can be approximately rational not in spite of – but because of – shortfalls in information." (Sniderman et al. 1990: 117, 135).

Indeed, the scholarly literature on voting discusses a wide range of devices assisting low information rationality (see Popkin 1991). To be sure, not all empirical studies are unambiguously reassuring about the efficiency of these tools (see, for example, Weisman 1994 on the role of opinion leaders, Huckfeldt and Sprague 1995 on interpersonal communication, and Luttbeg and Gant 1985 on ideological labels). But formal models and laboratory experiments suggest that, given enough time, either blind reliance on retrospective assessments of government performance or taking cues merely from public opinion polls may enable poorly informed voters to emulate fully informed behavior (McKelvey and Ordeshook 1986, 1990). At least, random errors in individual choices cancel out each other's effect. True, experiments with deliberative polling suggests that there are systematic patterns to the way citizens' attitudes change on specific issues under the impact of reflection (Fishkin and Luskin 1999), and Bartels's (1996) findings imply that even in long-established democracies, election results may be different from what they might be without knowledge-based voter inequalities. But the political relevance of the remaining differences between observed and fully informed behavior may still be negligible.

Apart from a low ceiling to any one citizen's influence and low information rationality, there is a third mechanism that can also reduce voter inequalities. The pulling of many political decisions across time and issues into a single vote assures the usually – though not always – small impact of any one social characteristic on the vote. Therefore, all contenders may end up with fairly similar proportions of likely nonvoters and poorly informed voters among those who, given their preferences on all matters political, would have presumably voted for them if they had voted at all and had been fully informed. Indeed, it is a familiar finding that the political attitudes of voters and nonvoters barely differ (Gant and Lyons 1993; Studlar and Welch 1986; Teixeira 1992: 100). Hence, even if political involvement depends, to some extent, on age, class and other things that influence vote choice, voter inequality can still remain low.

The above arguments about the likely insignificance of voter inequality also imply that its degree depends on the political context: e.g. how closely party alignments follow social cleavage lines, and how conducive the institutional design is to high turnout. The information shortcuts that less than fully informed voters can rely on may be more or less relevant, reliable and abundant depending on the skills of the competing parties, communication patterns within and across particular groups, the institutions of civil society, the media system, the age of democracy, and so forth. All in all, the problem calls for an empirical investigation: it is plausible that unequal capabilities and motivation to engage with politics create inequality of political influence between groups, but the extent of these inequalities may well be trivial. It should obviously be a major concern for political sociology to determine whether this is indeed the case.

THE OUTLINE OF THE NECESSARY AND POSSIBLE TEST

Remember that voter inequalities cannot emerge from just about any temporary differences in turnout and information-level between politically relevant groups. Many of the latter surely reflect just passing apathy among some citizens – caused, for instance, by the appalling recent record of their favorite party –, or unequal mobilization efforts by the different political camps. The first has nothing to do with political inequalities: this apathy-instilled temporary drop in political involvement is caused by a weakened commitment to a party by its potential voters. As it was argued above, the strength of commitment may well be a valid and effective expression of underlying political preferences. Unequal mobilization, in its turn, may have more to do with political inequalities than apathy, but only with inequalities of resource distribution between parties, rather than the voter inequalities explored in this paper.

Voter inequalities, as such, stem *from persistent differences in political involvement between groups of citizens that are caused by entirely different factors than the fact that the underlying political preferences of these groups are not identical.* However, if the political preferences of these groups would not differ, than their unequal political involvement would not generate political inequalities.[10]

So the first step in any empirical analysis of the problem must be to identify those groups that, because of arguably non-political influences, show below average turnout and political knowledge, and at the same time may differ in the distribution of their vote choices from other groups. They are the only ones who can remain, in one way or another, underrepresented at the polls, specifically because of turnout- and knowledge-based inequalities.

Once relevant groups have been identified, we need to calculate the difference between actual election outcomes – or to be precise, votes reported by respondents to post-election surveys – and those that would have been obtained in the same election in

10 In that case, we may even consider individual-level variation in political involvement a spontaneous social process of delegation and representation through self-selection, which is certainly close to how Berelson et al. (1954: 110–12) interpreted the role of opinion leaders.

the absence of turnout and/or knowledge-gaps between these groups. This latter will be derived through simulating the election results that would obtain if (1) all voters voted and all were fully (and thus equally) informed; but (2) all relationships remain the same that we can observe in actual empirical data between vote choice, information level, and the traits that can influence both vote choice and political involvement. This is done with an adapted version of Bartels' (1996) model. This model depicts vote choice as a function of interactions between political information level and various possible determinants of vote choice. Thus, the model allows that increases in political information level may have different effects on vote choice in different groups, moving some of them towards party A, others towards party B, and leaving vote distribution in yet other groups entirely unchanged.[11]

The parameter estimates obtained with this model of vote choice allow us to simulate expected vote distributions in any group defined in terms of the independent variables in the vote function. The simulations can refer to any postulated distribution and mean of participation and political information level in the electorate. Here I am interested in the special case of 100 percent participation and "full" information in the entire electorate, with "full" information operationalized as an appropriately and equally high information level in the whole electorate. Unlike in Bartels' (1996) study, the question asked here is not whether the gap between observed and simulated election outcomes is bigger than the one that made all the difference between winning and losing in particular elections. Given the rather arbitrary choice of what "full" information really means, this is not very interesting anyway. Moreover, had turnout been higher and voters more informed in a particular election in the past, all political actors would presumably have behaved differently in that situation, and thus the election results may also have been widely different from the computer-simulated fully informed outcome that is considered here. So, the meaningful question is not so much about the size of the difference between what was and what could have been the overall result in particular elections in the past. Rather, the question that can be answered is whether the simulated election results would have systematically increased, and to what extent, the weight of exactly those preferences in election outcomes that are over-represented in groups that show below-average political turnout and/or information level for other reasons than their political preferences.

To see exactly how this can be done recall the previous discussion about the moralistic objection to interpreting supposedly self-inflicted handicaps of particular individuals as relevant political inequalities between the groups. As explained there, the potential victims of voter inequalities are not so much the nonvoters and the poorly informed voters as such, but rather all members of those low-involvement groups that have distinct distributions of political preferences that differentiate them from high-involvement groups. Therefore, a test of voter inequalities does not require us to

11 This possible polarization effect of information was documented by Zaller (1992); Sniderman et al. (1993).

estimate how particular individuals would vote if they became fully informed.[12] The necessary test is far simpler than that – and this is exactly why it can be carried out in the first place. It is enough to estimate how votes are distributed among parties in the relevant groups at the observed level and in the hypothetical situation when all voted and all were fully informed.

In other words, the simulation of fully informed election results at 100 percent turnout requires a model of vote choice that satisfies a rather different criterion than maximal explanatory power. Instead, the model must be able to isolate any residual association that remains between vote choice and political knowledge once those determinants of knowledge and turnout are held constant, which, like the variables in *Table 1*, may influence vote choice, too. Once these – let's call them type A – factors are controlled for we can estimate the net impact of turnout and information level on aggregate election outcomes.

The critical test is rather straightforward in the case of knowledge-based voter inequalities. The distribution of votes within groups defined in terms of type A characteristics has to be compared to how these vote distributions may look like if the postulated changes occurred in the level and distribution of political knowledge in the electorate. If the sum of absolute differences between the proportion of votes that each individual party obtains in the two situations increases as the average political information level in the group decreases, then it is plausible to assert that the distance between actual and fully informed voting behavior is higher for low-information than for high-information social groups. Thus, knowledge-based voter inequalities exist, and a simple calculus will be able to ascertain their degree.

How much change occurs in votes within particular groups if their information level increases depends not only on the extent of change in information level, but also on how extra information influences vote choice among particular groups of people. This is an empirical question that Bartels' model can reveal with the help of appropriate survey data. The gap between expected vote distributions at the observed information level on the one hand, and at a suitably selected higher level on the other should be computed for all relevant groups. This gap will show how far a particular group as a whole is from its own fully informed behavior.

One would guess that only in exceptional cases is the fully informed voting behavior of a group characterized by unanimous support for a single party or candidate. This is so because the groups in question are defined solely in terms of type A characteristics, i.e. things that can influence both vote choice and political involvement, i.e. turnout and/or knowledge. There must be many further

12 This is a second way that the present analysis differs from that of Bartels (1996), who attempted to estimate the proportion of individuals who would change their vote choice if they became fully informed but otherwise everything in this world remained the same. I think this is a task impossible, since there is likely to be a very large number of attitudes that can influence vote choice in interaction with political information level, and yet he excluded them from his model because they were not expected to influence political information level (but be probably shaped by the latter). As I will argue later, the problem is not with the exclusion of these variables from the vote choice model. Rather, the erroneous idea is that we can estimate the proportion of individuals who would change their vote choice if they became fully informed without accomplishing a mission impossible, namely the inclusion in the vote function of every variable that can significantly influence the vote choice in interaction with political information level.

characteristics of type B, which influence vote choice but do not systematically influence political involvement. The groups defined in terms of type A characteristics are likely to be heterogeneous with respect to these additional, type B determinants of vote choice. Hence the fully informed voting behavior of individual group members is unlikely to be identical.

However, in order to simulate the fully informed voting behavior of each relevant group as a whole, we need not include any of these type B characteristics in the vote function so as to be able to estimate aggregate vote distributions in the groups at the observed and the hypothetically postulated turnout and information levels. In fact, since type B characteristics themselves may change if information level increases, their inclusion in the vote choice model would only create unnecessary complications and imprecision in estimating the net effect of information on the vote. Of course, if interactions between type B characteristics and information level impact vote choices, then these effects will also influence the amount of aggregate change in vote distributions that a change in political information level can cause. But the net impact of all these changes on aggregate vote distributions in groups defined solely in terms of type A characteristics will already be fully captured through the simulation based on the kind of models proposed by Bartels (1996), which depict vote choice solely as a function of interactions between political information level and type A characteristics.

The test of turnout-based voter inequality is slightly different, since this inequality operates through a simpler mechanism than knowledge-based inequalities. If unequal turnout can, on its own, cause political inequalities, then it is only because a less unequal turnout would make previously low-turnout groups account for a larger percentage of the electorate than before. Turnout-based voter inequalities exist to the extent that equal turnout would make election results more similar to the actually observed distribution of the vote within those groups, whose turnout is negatively influenced by something unrelated to their political preferences.

To sum up, the proposed tests explore the electoral impact of a hypothetical disappearance of some or all inequalities in participation and knowledge level. We saw that such inequalities systematically occur between socio-demographic groups (see *Table 1*). The question is whether they have any sizeable and systematic impact on election outcomes. If the answer is no, we cannot talk of voters' inequality in terms of electoral influence. Whatever other inequalities of electoral influence may exist, they probably derive from something else than the voters' own characteristics.

ESTIMATION ERRORS

Even social scientists have to work in a less than ideal world. That is why they make assumptions. Above I have already introduced some (about the responsiveness of rulers to election outcomes, voter rationality, and free and vigorous competition between parties/candidates), which must approximate reality if the concept of voter inequality is to have any meaning. The empirical analysis reported in the second part of the paper, forthcoming in the next issue, suggests that even if we trust the validity of those assumptions, the reality of voter inequality is scant. However, these empirical

results themselves are dependent on the validity of some further assumptions, which were imposed on the present analysis by limitations to the available data. These assumptions are explained below and can be relaxed by later replications of the analysis if more data becomes available.

Remember that the analysis starts with estimating how vote choices in a particular election were influenced by type A factors – i.e. variables that are likely to influence both vote choice and political involvement – and information level among a sample of self-reported voters. As explained above, it is not a compromise but a must that only type A factors enter this part of the analysis alongside with political information level. The parameter estimates so obtained can be used to simulate how nonvoters might have voted if they had participated in the election and their vote choice was influenced the same way by these type A factors as those of the actual voters. The only difference between the simulated election results among the nonvoters and the observed result among voters will be due to the fact that some of these type A factors were directly correlated with electoral participation after controlling for all other variables in the vote function. Similarly, the estimates derived from the vote choice model will help to determine how vote distribution may change within particular groups if all their members became fully informed but everything else in this world remained absolutely the same.

The first assumption that I have to introduce here anew is that the socio-demographic variables listed in *Appendix B* are the only relevant type A characteristics. They are all socio-demographic characteristics, which is handy. This way we know for sure that the traits held constant while fully informed votes are estimated are such that they themselves cannot change because of an increase in information level. Yet it is certainly possible that some relevant type A characteristics – socio-demographic or otherwise – are omitted from my vote choice models. The net bias caused by this omission will inevitably spill over into the simulated vote distributions that are to play critical role in the analysis. On the positive side, this bias has no predictable direction; for instance, there is no way to tell whether this bias leads to an over- or an underestimation of turnout and information effects in particular elections. Moreover, if there are many unduly omitted type A variables, then the biases caused by their omission will be randomly distributed and cancel out each other. The more elections and samples are included in the analysis – and I will use 18 of them in the present analysis -, the more likely this random distribution will be.

The obvious challenge to this assumption is that some preferences, which are not perfectly captured by socio-demographic variables, may influence vote choices and political involvement at the same time. However, there seems to be no cross-contextual evidence that would clearly identify any other shared determinant of vote choices on the one hand, and turnout and political knowledge on the other, than a relatively well-known and manageable set of socio-demographic variables – plus, in the case of turnout effects, political information level – that I will control for in my analyses. Hence, I can see no reason to believe that a particular political taste would, like a low level of education, consistently and repeatedly lead to below average political participation or information level, once the socio-demographic determinants of political taste are held constant.

Of course, anyone can invent neat theories about how a particular set of attitudes can systematically influence political involvement and, at least occasionally, vote choice, too. Suppose that the weakness of integration in the political community is an important determinant of vote choices, and, at the same time, a major cause of young people showing below average political knowledge. Then, even if the relatively ignorant young voters were to become more knowledgeable, they may not vote the same way as the currently more involved, young people do. They will still remain different from the latter with respect to an attitudinal determinant of vote choice. If so, the analysis of this paper is, to that extent, wrong.

The example shows the validity of the warning that my analyses might have produced different results if I had controlled for more variables in the vote function. But this warning is no more valid in this context than in the case of any other empirical analysis. As long as there is no systematic evidence pointing to missing control variables that (1) can demonstrably influence vote choice across a large number of democracies; and (2) are systematically correlated with turnout or political knowledge; but (3) nevertheless remain resistant to changes in the examined aspect of political involvement, the epistemological objection boils down to the familiar warning that further research may prove me wrong. If more variables of this type are identified, they can easily be incorporated into the model proposed here, without requiring changes in any other feature of the analysis.

Apart from the possible omission of some relevant type A variables from the vote functions, there are two more sources of measurement error in the simulated vote distributions that my analysis relies on. For both, it seems reasonable to assume that in a sufficiently large random sample of elections, the errors caused by these factors are randomly distributed with no systematic bias with respect to the relevant test results. However, the 18 elections in the sample that I analyze hardly constitute a large sample, and they were not selected randomly. Rather, case selection was led by data availability, which, in the case of survey research, predictably works in favor of including Anglosaxon rather than Latin American countries and so forth. Yet I have no better choice but to assume that these two undeniably relevant sources of error do not bias my test results.

The first of these errors stems from the fact that the simulated vote distributions used in my test are based on survey data and parameter estimates that are subject to sampling error. A further source of measurement errors is created by the possibility that the relationships between information level and vote choice may, in some elections at least, be influenced by random, situational shocks, that are, within the present analysis, impossible to separate from systematic effects like that of voter inequality.

For example, imagine an election where political information level influences vote choices in just two ways. On the one hand, we see the old Marxist story staged in real life. Political awareness polarizes voters along social class lines, by making lower class voters more likely to vote for an anti-market party as their information level increases, and pulling middle class voters towards a pro-market party in proportion to their political information level. Now, suppose that there is a last-minute breaking news about a money scandal in the anti-market party, but it does not reach everyone.

As a result, all better informed voters become more likely to vote for the pro-market party, since they are the most likely to learn about the scandal. But, if poorly informed middle class voters miss the news on the money scandal, they will be far less likely to accurately express their preferences regarding either money scandals or economic issues in the vote than the better informed upper-class voters will. In contrast, poorly informed lower-class voters may end up dividing their vote between the two parties exactly the same way as their better informed socio-demographic look-a-likes, provided that the pull of the two information effects is equally strong.

Clearly, the victims of less-than-perfect information in the electorate are, in this example, both the well-informed and the poorly-informed middle class voters, in the first place, and – to the extent that the money scandal did not receive a fair enough punishment from the voters – the electorate as a whole, in the second place. On the individual level, there still is a positive relationship between political information level and the probability of casting a seemingly fully informed vote, although this correlation may have totally disappeared among lower-class voters. But, on the level of social groups, the relationship between fully informed behavior and information level is simply reversed: the middle class is less likely to vote as if its members are fully informed.

Thus, if we looked at just one election, and that showed the above pattern, then we would conclude that lower-class voters really are not victims of knowledge-based voter inequalities. However, the reality would remain that it was just the work of a situational information effect on voting behavior and election outcome that hid the impact of voter inequality. To tell the effects of voter inequalities apart from the situational effects of preferences on information level and of information on the vote, the analysis has to consider trends that persist across a large number of countries and elections. In individual elections, the impact of systematic voter inequality may even become hidden if it runs against the current of situational influences. Only an analysis of a heterogeneous sample of polities and elections can say anything of relevance about how much impact voter inequality can have in any election.

Therefore, my analysis pools data across many elections and countries. First, I estimate election-specific models of how information level influenced vote choices. These models yield estimates of fully informed election outcomes, i.e., what percentage of the vote particular parties received in the electorate as a whole, or within particular subgroups. As discussed above, the estimates about particular kinds of parties and social groups will include some measurement errors that must be randomly distributed and average zero if a large random sample of democratic elections is considered.

THE STORY SO FAR

In this first part of the article I argued that both turnout- and knowledge-based inequalities are likely to violate the one-person-one-vote ideal in democratic elections. However, I pointed out that these effects may well be extremely small, hence only an empirical analysis can really determine whether democratic elections are a reasonably

neutral and egalitarian method of aggregating popular preferences regarding political outcomes. I pointed out that such a test is possible, but its results are likely to be polluted by random measurement error stemming from at least three different sources. Therefore, a reliable empirical analysis of voter inequalities must probe survey data from a relatively large number of democratic elections. The second part of the paper, forthcoming in the next issue of this journal, reports an empirical analysis involving data on over a dozen democratic elections carried out between 1996 and 2000.

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APPENDIX A: DATA SOURCE

All empirical analyses reported in the paper are based on pooled cross-national data from the June 2000 version of the CSES (Comparative Study of Electoral Systems) Integrated Micro Data Set, made publicly available through the website of the project hosted by the American National Election Study. In each country covered by the study, national probability samples of the adult population were interviewed shortly after a national election. Because of their different party systems and very substantial over-sampling in the CSES study in the respective CSES surveys, East Germany and Scotland were treated in the present analysis as if they were separate countries. Hence, the total number of countries/party systems in the analysis is 18. Errors found in the party codes were corrected with the prompt help of the principal investigator of the study in the Ukraine. For further information regarding study design, the reader is referred to the codebook of the study that can be downloaded together with the data set at <*http:/www.umich.edu/~nes/cses/*>.

Inclusion and Exclusion of Cases in the Analyses

Argentina, Israel and Lithuania were omitted from all analyses reported in this paper because the political knowledge variables for these countries are missing from the June 2000 version of the CSES data set. A further 1,442 respondents were excluded

from the analysis who claimed to have voted in the last election, but did not give a valid answer to the question about vote choice. Another 486 respondents with missing values on both variable V115 (participation in the last election) and VOTE (vote choice) were excluded from all analyses. Five respondents with a valid response to the question about vote choice in the last election, but originally assigned a 'did not vote' answer at V115, were recoded on all variables pertaining to participation in that election, as if they had voted. Supporters of 'other parties' in Japan, the Netherlands and Scotland were excluded because they had been too few to be treated as a separate category on the VOTE variable (on the coding of this variable see below).

Weighting

Within countries/party systems, the data are weighted with the country-specific weighting variables if any were provided with the CSES data set. Out of the multiple choices available, GERWT1 was used to weight the German and NZWT2 to weight the New Zealand data file. The mean of the weight variable was adjusted to equal exactly 1 within each of the 18 countries/party systems. For all analyses that involved a pooling of data across the 18 systems, the weights were adjusted so as to give equal weight to each country/party system.

APPENDIX B: VARIABLES AND CODING

Variables in *Table 1*

AGE/10: age of respondent in years divided by ten. Missing values were recoded as 4.5.

ABS(AGE – 45)/10: absolute value of (AGE – 45) divided by ten.

DEVOUT: coded 1 for weekly church attendance and 0 otherwise.

EDUCATION LOW: coded 1 for primary education or less and 0 otherwise.

EDUCATION HIGH: coded 1 for university education or more and 0 otherwise.

FARM JOB: coded 1 for agricultural occupation and 0 otherwise.

FEMALE: coded 1 for women and 0 otherwise.

INCOME: personal income, divided into quintiles (from 1 = lowest to 5 = highest) by country. Missing values recoded as 3.

INFO: the respondents' general political information level. This summary measure is based on variables V110, V111 and V112 of the CSES study, which record responses to three neutral, factual and unequally demanding country-specific political knowledge questions. For instance, American respondents were asked to name the office held by William Rehnquist (correct response: Chief Justice of the Supreme Court), Al Gore (Vice President) and Newt Gingrich (Speaker of the House of Representatives); and 7, 85 and 54 percent of them gave correct answers, respectively. By way of comparison, the questions in

the Czech Republic concerned the percentage threshold that parties have to pass to win any seat in lower house elections, the name of the Minister of Transportation at the time of the election, and the number of seats in the lower house, which were correctly identified by 72, 59 and 57 percent, respectively. To create variable INFO, the number of each respondent's incorrect responses was subtracted from the number of his or her correct responses. The resulting score was recoded using the Blom procedure so as to assign such values to the variable that – within each country – INFO's distribution approximated, as closely as possible, that of a continuous variable with a normal distribution, a mean of 0.5 and a standard deviation of 1/6. This was achieved by first computing the normal scores with SPSS 10, then recoding all normal scores lower than minus 3 to minus 3 and all normal scores higher than 3 to plus 3. Finally, the normal score values were linearly transformed so that the theoretical minimum and maximum of variable values became 0 and 1, respectively. Thus, the country mean and standard deviation of political information level is essentially constant across samples.

MANUAL WORK: coded 1 for nonagricultural manual workers and 0 otherwise.

RACE (used instead of MINORITY1 and MINORITY2 in the pooled cross-national analysis reported in table 1): coded 1 for Asians in Australia, Roma in Hungary, natives in Mexico, Maori people in New Zealand, African-Americans in the US, people of Asian or African origin in England and Wales, and 0 otherwise.

RURAL RESIDENCE: coded 1 for residents in rural areas and 0 otherwise.

TURNOUT-MEAN: the sample mean of VOTING, in other words the fraction of respondents with non-missing values on V115 of the CSES study who reported to have voted in the last election.

VOTING: participation in last election. Coded 1 if the respondent recalled to have voted in the last election, and 0 if the respondent recalled to have abstained. See *Appendix A* on the handling of missing values and contradictory responses.