CSD **Center for the Study of Democracy**

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Since the onset of the current wave of democratization, there has been a growing interest inresearching the institutional factors underlying citizen support for democracy.[*] This has also, in part, reflected a renewed scholarly interest in seeking answers to the questions of whether and how institutions 'matter' (Weaver and Rockman 1993)—in this instance, with regard to the theme of democratic stability. Of all the institutions that may matter, few would deny that electoral systems are among the most significant. They are the central institutional design issue for a new polity to resolve (e.g. Sartori 1997; Taagepera 2002); and they are also among the most malleable of the political institutions, a point first stressed by Sartori, who wrote of the electoral system as 'the most specific manipulative instrument of politics' (1968: 273). Certainly, when compared with the other fundamental institutional decisions of a polity (such as, for instance, deciding between presidentialism and parliamentarism), electoral systems are generally far easier to change because, on the whole, they tend not to be constitutionally embedded and are therefore more open to the whims of politicians (Bowler, Carter and Farrell 2003).

     Electoral system design may be perceived as important by academic scholars and electoral engineers (Lijphart 1994; Reynolds 2002; Sartori 1997; Taagepera and Shugart 1989), but what tangible evidence is there of an electoral system actually making a difference to democratic stability? Developments in large-scale cross-national surveys have facilitated research into this question, with much of it focused on Arend Lijphart's well-known framework distinguishing between majoritarian and consensual democracies (Lijphart 1999). Under this framework, the electoral system is treated as a core variable and is operationalized in terms of its vote-aggregation properties as more or less proportional. The basis of Lijphart's argument with regard to electoral systems is that proportional systems are better than non-proportional systems because they facilitate the representation of all relevant societal and ethnic groupings.

     There is more to this argument than theoretical conjecture. In the penultimate two chapters of his *Patterns of Democracy* (1999), Lijphart provides detailed supporting evidence, using aggregate and survey data. This has prompted others to examine the cross-national evidence, though in some cases with differing conclusions (Castles 1994; Rose 1992). Two prominent studies are by Anderson and Guillory (1997) and Norris (1999), both of whom use cross-national survey data to test the role of proportional representation electoral systems in

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promoting citizen satisfaction with democracy. The Anderson and Guillory study, based on Eurobarometer data, finds clear evidence of a positive relationship between PR systems and measures of democratic satisfaction. By contrast, Norris's findings, using a far wider set of cases (based on World Values data), are more equivocal: if anything, 'majoritarian institutions tended to produce greater institutional confidence than consociational arrangements' (1999: 233; also Norris 2002).

Whether and how electoral systems can affect levels of voter satisfaction with democracy is therefore unresolved; work is required, among other things, on how best to operationalize the dependent variable (Linde and Ekman 2003). In this paper we argue that the independent variable is also in need of more attention. The studies to date have treated electoral systems solely in terms of their vote-aggregation outcomes, with attention focused on representation in the microcosmic sense (McLean 1991) in terms of who gets elected and the representation of social and ethnic groups—in short, the age-old issue of 'proportionality'. It is universally accepted in the electoral systems literature that the two most important features of an electoral system affecting aggregate proportionality are district magnitude (the number of politicians elected in a district) and electoral formula (the counting rule determining how votes are translated into seats) (e.g. Farrell 2001; Katz 1997a; Lijphart 1994; Rae 1967). But there is a third feature of electoral systems, ballot structure, and while its effects on proportionality are negligible (Lijphart 1994), there is no disputing that it has an effect both on voters, in the sense of determining the nature and extent of choice available to them on polling day, and on politicians, who are cognizant of the effect on voters and react accordingly.

The aim of this paper is to assess whether ballot structure has a wider impact on levels of voter satisfaction with democracy. We start, in section 1, with a discussion of the ballot structure dimension of electoral systems, how it might be conceptualized and what affects we might expect it to have on voter attitudes to politics. In section 2 we elaborate on how our principal dependent variable shall be operationalized. Unlike earlier studies that distinguish between proportional and non-proportional systems, this paper draws a distinction between preferential and non-preferential systems. Section 3 uses the latest wave of data from the Comparative Study of Electoral Systems (CSES) to assess the role of ballot structure, as well as a battery of other electoral system and individual-level variables, in influencing voter satisfaction with democracy in thirty countries. Section 4 takes a further look at the evidence by examining the potential indirect relationships between our electoral systems variables and measures of satisfaction with democracy. Section 5 concludes.

Ballot Structure and Democracy

From Douglas Rae (1967) onwards, the main distinction in electoral system ballot structures is between categorical and ordinal systems, the latter allowing voters greater choice in determining the fate of individual candidates. At one extreme are non-preferential systems, such as closed list, in which the voter makes a simple categorical choice between parties. At the other extreme are preferential systems, such as the single transferable vote (STV) system (also referred to as Hare-Clark, or choice voting), in which the voter can rank order all the candidates (from all parties) on a ballot paper. There is a range of preferential systems, which vary in terms of the degree of choice given to voters. Other prominent members of this category include: the cumulative vote, the limited vote, open list, panachage, and the alternative vote (AV; also referred to as preferential voting, or instant run-off voting) (Bowler, Donovan, Brockington and

Mello 2002; Bowler and Grofman 2000; Grofman, Lee, Winckler and Woodall 1999). These systems share in common the characteristic that the voters are given much greater freedom in completing the ballot paper, either in terms of making multiple marks against several candidates, or in some cases being able to rank-order the candidates.

The question of choice is not only centered on the *extent* of choice that is available to voters; it is also worth considering how electoral systems vary in terms of the *nature* of the choice, in particular over whether the choice is between parties or candidates (Bowler and Farrell 1993; Farrell 2001). This provides an additional perspective on how preferential systems can be distinguished from many other electoral systems (although there are some categorical systems, such as single member plurality, that are also candidate-based); and it adds strength to Bowler and Grofman's view that such systems may not 'belong to just one family tree but to several, depending on the kinds of question we want to ask about electoral systems' (2000a: 270).

Figure 1: A Typology of Electoral Systems Based on Ballot Structure Characteristics

	Extent of choice	
Nature of choice	*Categorical*	*Ordinal*
Candidate-based	Single member plurality (UK)	Single transferable vote (Ireland)
Party-based	Closed list (Spain)	Ordered list (Belgium)

These two dimensions of voter choice—extent and nature—provide the basis for the simple typology of electoral systems shown in Figure 1 (with illustrations of where some of the main electoral systems might fit). There can be little doubt that this feature of voter choice has important implications for how voters cast their ballot (not least on the degree of effort those bothering to vote are required to make in the polling station), how parties and candidates campaign, and how politicians represent their voters (e.g. Ames 1995; Bowler 1986; Bowler and Farrell 1993; Cox 1990; Katz 1980; Shugart 2001). It is easy to see how this might have an impact on the attitudes of voters to the political system.

The connection between ballot structure characteristics of electoral systems and voter attitudes to democracy derives from at least three mechanisms, one originating directly from the voting act itself, another based more indirectly on the relationship between politicians and their voters, and a third referring to the ideological tendency within the party political system. In the first instance, there is the argument, usually propounded by supporters of preferential systems like STV, that a principal strength is the maximization of voter choice.[1] According to George Hallett, 'the voter is saved from any worry about wasting his vote. His preferential vote is insurance against that. He can safely vote his real order of choice as far as he has any… Voting will always be worthwhile. You are almost sure to be a winner' (1984: 119-20). Enid Lakeman extols the virtues of STV for enabling 'each citizen to take part as freely and as fully as possible' (1974: 111). Even among more sober scholarly treatments, there is stress on how systems like STV give 'voters greater choice and makes possible ballot splitting to express highly differentiated preferences' (Bowler and Grofman 2000: 1). In a context in which voters are

being given more choice in the electoral act it could be argued that this should result in a greater sense of efficacy on the part of voters, and more say in electing their representatives.

Following on from this, a second perspective draws attention to the linkage between politicians and voters (e.g. Lawson 1980; Mitchell 2000). There is general agreement that ballot structure affects the representative role of politicians (e.g. Ames 1995; Carey and Shugart 1995; Shugart 2001), and studies based on surveys of politicians have demonstrated how electoral systems that are characterized by a candidate-orientation in politics and high degrees of preferential voting tend to produce greater attention to personal vote chasing by politicians and the maintenance of close links with their electorates (Bowler and Farrell 1993; Farrell and Scully 2003; though see Katz 1997). There are grounds for expecting a more positive attitude by voters towards their elected representatives in such systems (and by extension towards the wider political system) than might be the case in those electoral contexts in which politicians are devoting most attention to their internal selectorates.

Finally, there is the issue of how preferential systems might impact on party politics more generally, in which a distinction can be drawn between centrifugal and centripetal tendencies (Cox 1990; Sartori 1976). The key work here—in the context of engineering stability in divided societies—is by Ben Reilly (2001), who builds on earlier work by Timothy Sisk (1995) and Donald Horowitz (1991). The basic idea is that preferential electoral systems encourage a politics of accommodation between politicians. Unlike Lijphart's consensual framework (most recently, Lijphart 2002) which places stress on the need for strong, cohesive parties supported by closed list PR, in which the party elites can forge alliances across party lines and promote a top-down politics of accommodation, the Reilly perspective adopts a more bottom-up approach, in which the electoral incentives promoted by preferential electoral systems encourage politicians to move towards the centre ground in an effort to sweep up more support in the form of vote preferences (see also Reynolds 1999, on STV). The implication of this argument is that such tactics, if successful, should help nurture democratic stability—and therefore should be manifest in higher levels of voter support for democracy. This last mechanism—regarding the possible centripetal tendencies of preferential systems—suggests a significant role for these systems in newer democracies, in helping them to consolidate.

Preferential Voting and Candidate-Centredness

As we have seen (Figure 1), when the focus is on ballot structure, electoral systems can be differentiated in terms of the *nature* of the vote choice—party-based versus candidate-based votes—and also the *extent* of the vote choice—in terms of degrees of ordinality, or preferential voting. Systems characterized by candidate-based voting and high degrees of ordinality—which we shall refer to hereinafter as 'preferential' systems—encourage a greater emphasis by candidates on cultivating personal votes, as opposed to party-centred electoral systems, where the fate of the candidate is determined largely by the support for their parties. Following the lead of Matthew Shugart (2001; which in turn builds on his earlier work; see Carey and Shugart 1995) we develop an index of 'intra-party efficiency', which taps the preferential/non-preferential distinction in electoral systems.[2]

Like Shugart, we operationalize variations in our sample electoral systems based on three main characteristics that he terms *Ballot*, *Vote* and *District*, in which the higher scores across these components are indicative of a candidate-centred preferential system and lower scores of a party-centred categorical system. We have adapted Shugart's original schema in part because

our focus is on a wider range of electoral systems than dealt with in his paper (furthermore, unlike him, our focus is less exclusively on testing the overall 'efficiency' of the mixed-member electoral systems), in part also reflecting limitations in our access to full and complete data on all the cases covered by the CSES data set, and finally because of disagreements with some of his categorizations (as outlined below).

The *Ballot* component is designed to measure the degree of party versus voter control over the ballot placement of candidates, revealing the extent to which the party leadership (and/or selectorate) can exercise influence over the party's candidates. The lower the ballot control, the greater the incentive for candidates to place emphasis on their personal reputation. Our coding—which differs from Shugart's only in the sense that we do not include details on candidate selection rules[3]—is as follows:

1   Voters may not disturb the order of the candidate list;

2   Voters may disturb the order of the candidate list;

3   Ballot access requires first surviving a preliminary round of popular voting (a runoff election);

4   Ballot access nearly unrestricted.

Shugart's *Vote* component distinguishes between systems that require voters to vote for lists or candidates (a nominal vote). Our coding of this component also differs from Shugart's, but in this instance it is because we disagree with some of his underlying assumptions. In order to understand the basis for our disagreement, we first need to provide some background on how Shugart arrived at his codes. The Shugart codes build on an earlier paper (Carey and Shugart 1995), entailing a merger of what were two distinct components in that paper, $Pool_1$ and $Votes_1$.[4]

The first component, $Pool_1$, was designed to measure the extent to which votes cast for one candidate also contributed to the number of seats a party wins in the district, in which the greater the extent of pooling the lower the incentive for candidates to cultivate personal votes. On one extreme are electoral systems that have no pooling, so that a candidate's fate is determined solely by her personal vote chasing activities. Carey and Shugart view Japan's (now-defunct) SNTV system and electoral systems that incorporate candidate primaries as good examples of this. AV and STV are categorized as an intermediate category, 'where voters can designate to whom their votes should be transferred if they are not needed to elect their first choice, or if their first choice is too unpopular to be elected' (Carey and Shugart 1995: 422), whereas the list systems, regardless of their variation in terms of degrees of ordinality, are subsumed under the one category of 'pooling across whole party', and are placed on the opposite extreme to SNTV.[5]

Carey and Shugart's placement of AV and especially of STV is problematic, and certainly is at odds with the usual conceptualisation of these systems as promoting candidate-centred electoral politics (for discussion, see Marsh 2000; Katz 1980). It may well be true that voters 'can designate' how their votes will transfer, but what has to be recognised is that the candidates (in varying degrees of desperation) are seeking to influence the nature of that designation. The result is a high degree of candidate-centred politics. For that reason, we find it hard to support the contention that the application of the $Pool_1$ component should result in STV being ranked at a midpoint on a scale of party-centred versus candidate-centred politics.

The $Votes_1$ component, as outlined by Carey and Shugart (1995), distinguishes between single-vote list and nominal systems, with systems of 'multiple votes' (i.e. ordinal systems) comprising an intermediate category. According to Carey and Shugart, 'the value to legislative

candidates of personal reputation' is highest in nominal systems (1995: 422). They provide very little indication of how they might distinguish the different multi-candidate systems, but the following extract is revealing:

> [W]hen multiple votes are cast, personal reputation is not as overwhelmingly important relative to party reputation as when all candidates are competing simultaneously for the same indivisible support of each voter. When multiple votes are cast simultaneously, the candidates from one party can run as a bloc, rather than running against each other (p. 422).

Again, this appears to underestimate the degree of intra-party candidate-centred campaigning that often occurs in preferential elections such as STV in Ireland (in some instances this takes the form of full scale personal battles between candidates of the same party; e.g. Farrell 1985).

In his more recent paper, Shugart (2001) merges the $Pool_1$ and $Votes_1$ components, and his new *Vote* component comprises the following ranking:

1. Vote for list only;
2. Vote list or nominal, but list votes predominate;
3. Vote is nominal only, but vote may pool or transfer to other candidates;
4. Vote is nominal or list, but nominal votes predominate and pool to other candidates;
5. Vote is nominal only and non-transferable.

Clearly there is no disagreeing with the view that a closed list system lies at one extreme on this component, with ordered list systems lying in an intermediate position. For the reasons set out above, our biggest area of difference relates to those systems in which the vote is nominal only and non-transferable—i.e. the single member plurality systems in which the vote is a simple categorical choice between candidates.[6] While this is likely to promote greater degrees of candidate-centred politics than closed list systems, because candidates are striving for personal votes in their district, it is inconceivable that this would result in higher levels of personal vote chasing than systems where the vote is nominal only with the vote pooling or transferring to other candidates, i.e. STV. We also contend that STV systems promote personal vote chasing to a higher degree than open list systems (where the vote is nominal or list, but nominal votes predominate and pool to other candidates). As a consequence, our *Vote* component is coded as follows:

1. Vote for list only;
2. Vote list or nominal, but list votes predominate;
3. Vote is nominal only and non-transferable;
4. Vote is nominal or list, but nominal votes predominate and pool to other candidates;
5. Vote is nominal only, but vote may pool or transfer to other candidates.

In the case of the *District* component our coding is identical to Shugart's. This component takes account of an earlier argument developed by Carey and Shugart (1995) about how the effect of district magnitude (*M*) can vary depending on the nature of the ballot structure. In systems where voters cast party-based votes, they find that the personal reputation of the candidate declines in significance as *M* rises, whereas in systems characterised by candidate-based (nominal) votes, as *M* rises and candidates face more inter-party and intra-party competitors, the incentives for personal vote chasing increases.[7] This component is coded as follows:

1   *M*>1, with *Vote*=1;
2   *M*=1;
3   *M*>1, with *Vote*>1 and *Ballot*>1.

Using this coding scheme, we can locate our 30 countries[8] on a scale from predominantly candidate-centredness to predominantly party-centredness; the results of this exercise are shown in the first part of the Appendix Table. For now, taking all except the mixed-member (MM) systems into account, this produces seven different grades. The scores on our index do not carry any numerical value; the index is simply based on the two logical extremes, taking account of the seven intervals. The resulting index values are reported in the first column of Table 1.

Table 1: Scoring Electoral Systems on the Intra-Party Dimension

Index	Component scores	Description of system	Cases
10.0	4, 5, 3	STV	Ireland
8.6	4, 5, 2	AV	Australia
7.1	2, 4, 3	Open list, panachage	Denmark, Switzerland
5.7	3, 3, 2	SSD, two rounds	France, USA
4.7	[MM fix A]	MMS with runoff rule	Hungary, Lithuania
4.3	1, 3, 2	SSD-plurality with party control	Canada, UK
3.6	[MM fix B]	MMS with plurality rule	Germany, Japan, Korea, Mexico, New Zealand, Taiwan, Thailand
2.9	2, 2, 1	Ordered list	Belgium, Czech Republic, Netherlands, Poland, Slovenia, Sweden
1.4	1, 1, 1	Closed list	Bulgaria, Iceland, Israel, Norway, Portugal, Romania, Spain

Notes: The rankings range from most candidate-centred to most party-centred electoral systems. For details on the coding, see text and the Appendix Table. MM fix A: For MM systems with plurality rules in the SSDs. Mean of 5.7 (SSD-plurality score) and 1.4 (closed list score) = 3.6. Mean of 3.6 and 5.7 (SSD-plurality score) = 4.7. MM fix B: For MM systems with runoff rules in the SSDs. Mean of 4.3 (SSD two rounds score) and 1.4 (closed list score) = 2.9. Mean of 2.9 and 4.3 (SSD two rounds score) = 3.6.

Following Shugart's lead, a separate set of assumptions apply with regard to MM systems. These mix nominal and list voting elements: since research demonstrates that they tend on the whole to place the greater emphasis on the particularistic features of SMP systems (in terms of the legislative role of MPs) than on closed list systems (Shugart and Wattenberg 2001), we need to produce an index rating that places them somewhat closer to the former. In order to do this, for those MM systems that use plurality rules for the nominal vote element (in the single seat districts [or SSDs] these include Germany, Japan, Korea, Mexico, New Zealand, Taiwan, and Thailand), we first take the mean of 4.3 (SSD-plurality score) and 1.4 (closed list score),

which is 2.9. Then, to reflect the bias in favour of SSDs, we take the mean of 2.9 and 1.4 (SSD-plurality score), producing a score of 3.6. In the case of those MM systems that use runoff rules for the nominal vote element (Hungary and Lithuania), the means are based on the SSD two-round systems rather than on the SSD-plurality systems, thus producing a score of 4.7.

The next section tests what role this intra-party variable has in influencing levels of satisfaction of democracy.

Preferential Systems and Voter Satisfaction with Democracy

In the first instance, we can assess where our thirty countries lie on a scale measuring levels of satisfaction with democracy vis-à-vis their placement on our intra-party measure. This is set out in Figure 2, which uses the intra-party measure outlined in Table 1 and a question about satisfaction with the democratic process, which is scored from a low of zero to a high of 10.[9] The correlation between the two variables is 0.32, showing that the higher the candidate-centredness of the electoral system, the higher the level of popular democratic satisfaction. At one end of the spectrum are ideal country types including Ireland and Australia, which have strongly candidate-centered systems and very high levels of voter satisfaction. At the other end, there is Bulgaria, and to a lesser extent Slovenia, which exhibit strongly party-centered electoral systems and the lowest levels of voter satisfaction among the 30 countries in our sample. Inevitably, there are also countries that do not conform to this pattern: Norway, the Netherlands, Spain and Iceland all have relatively high levels of voter satisfaction but also maintain electoral systems which are, according to the coding, party rather than candidate-centered.

These results, of course, are based on the thirty countries each treated as a unit of observation; and this is reflected in the relatively high correlation (.32) between the two variables. But voter satisfaction is a consequence of a wide range of individual circumstances in addition to systematic characteristics, and all must be taken into account in order to test the robustness of the finding in Figure 2. In order to control for these potentially confounding characteristics, we rely on the individual level CSES data, which include 56,453 observations across the thirty countries.

In addition to our intra-party variable, the other independent variables are of two types. First, there are the characteristics of individual voters, ranging from gender, age and marital status, to education, employment characteristics and income.[10] Following the lead of the studies discussed above (Anderson and Guillory 1997; Lijphart 1999; Norris 1999), the other characteristics of the electoral system that we take account of in our multivariate model include the following (see the second half of the Appendix Table). Disproportionality is measured by the Gallagher index,[11] with the higher the figure the greater the disproportionality produced by the electoral system. Assembly size is also included and we should expect greater proportionality where the size is larger, although this could be countered by higher levels of disproportionality (Lijphart 1994). Finally, the average voting age population per MP measures the proximity of the voter to the elected representative, and we would hypothesize that smaller ratios of voters to MPs would increase voter satisfaction (Carey and Shugart 1995) since elected representatives would be more visible and more accessible to their electors.[12]
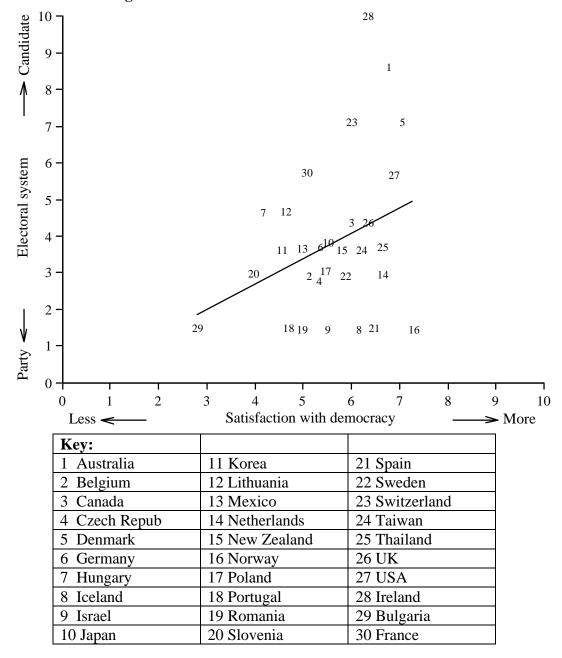
Figure 2: Ballot Structures and Voter Satisfaction

Key:		
1 Australia	11 Korea	21 Spain
2 Belgium	12 Lithuania	22 Sweden
3 Canada	13 Mexico	23 Switzerland
4 Czech Repub	14 Netherlands	24 Taiwan
5 Denmark	15 New Zealand	25 Thailand
6 Germany	16 Norway	26 UK
7 Hungary	17 Poland	27 USA
8 Iceland	18 Portugal	28 Ireland
9 Israel	19 Romania	29 Bulgaria
10 Japan	20 Slovenia	30 France

In order to estimate the net contribution of the intra-party dimension to voter satisfaction, we provide four regression models (Table 3). The first model includes just one independent variable—the intra-party dimension—and the standardized coefficient therefore represents the correlation between the two items.[13] The second equation includes the measures of voter characteristics. In this model, while the intra-party dimension is very slightly reduced in magnitude, it remains the strongest predictor in the equation; other variables of note are the importance of family income and unemployment, with more affluent respondents being more satisfied than their less affluent counterparts, net of other things. Net of a wide range of individual characteristics, then, the intra-party measure remains an important predictor of the degree of voter satisfaction with the democratic process in the particular country.

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Table 2: Variables, Scoring and Means

Variable	Scoring	Mean	St Dev
Dependent variable			
Satisfaction with democracy	0=very unsatisfied, 3.3=unsatisfied, 6.7=satisfied, 10=very satisfied	5.47	2.78
Voter characteristics			
Age	Years	45.40	16.78
Gender	1=male, 0=female	.47	.50
Tertiary education	1=yes, 0=no	.19	.39
Unemployed	1=yes, 0=no	.05	.23
Family income	Quintiles	2.95	1.38
Other electoral system characteristics			
Intra party index	From a low of 0 to a high of 10	3.89	2.16
Disproportionality	From a low of 1.49 to a high of 21.37	6.13	4.26
Assembly size	Number in hundreds	2.96	1.77
Voting age population per MP	Number in thousands	66.32	72.86
Country characteristics			
Democratic experience	Years since universal franchise	57.40	32.65
GDP per capita	Thousand USD	21.62	8.41

Source: CSES combined (module 1 and module 2) dataset for the thirty countries listed in the Appendix Table.

The intra-party variable maintains its predictive strength when we introduce the three additional electoral system characteristics into the equation. As we would expect, all of the three electoral system measures are important, and this is consistent with the studies cited above (Anderson and Guillory 1997; Lijphart 1999). It is interesting to note that a smaller ratio of voters to elected representatives increases satisfaction—again, net of a wide range of other characteristics. The fourth equation shows that much of the importance of the intra-party dimension is attributable to country characteristics—here measured by the length of the democratic experience and GDP. Although the intraparty dimensions remains statistically significant, the coefficient drops from .13 to .01, suggesting that much of its impact in shaping democratic satisfaction is a consequence of the accumulated democratic experience and economic development of the country in question.[14]

Electoral Systems and Political Attitudes

So far we have viewed electoral systems as having a direct effect on satisfaction with democracy, and the results in the previous section have shown that there is strong empirical support for this proposition, net of a range of other factors. A further possibility, which we test in this section, is that electoral systems—as conceptualised by our main intra-party variable, and also by the more conventional features of aggregate disproportionality, assembly size, and the ratio of MPs per voting age population (VAP)—also have indirect effects on satisfaction with democracy, via the more general political views that citizens form about how the system operates and how effective it is.[15] The analysis in this section provides a sterner test of our intra-party variable, as well as of

the other electoral system variables, because on this occasion we are looking for evidence of the actual 'mechanisms' of linkage between the electoral system feature and the levels of voter satisfaction with democracy.

Table 3: Predicting Voter Satisfaction in Three Models

	Eq 1		Eq 2		Eq 3		Eq 4	
	b	beta	b	beta	b	beta	b	beta
Intra-party dimension	.14*	.11*	.13*	.11*	.13*	.10*	.01*	.02*
Voter characteristics								
Age			.00	.01	.00	.00	.00	.00
Gender			.22*	.04*	.22*	.04*	.19*	.04*
Tertiary education			.16*	.02*	.10*	.02*	.00	.00
Unemployed			-.76*	-.06*	-.76*	-.06*	-.61*	-.05*
Family income			.12*	.06*	.12*	.06*	.11*	.06*
Other electoral system characteristics								
Disproportionality					-.01*	-.03*	-.01*	-.04*
Assembly size				.	-.01*	-.03*	.01*	.02*
Voting age pop per MP					.01*	.06*	.00	.00
Country characteristics								
Democratic experience							.01*	.17*
GDP							.01*	.10*
Constant	4.92		4.46		4.59		3.45	
Adj R-squared	.01		.02		.03		.07	

* statistically significant at p<.01, two-tailed.

Notes   Ordinary least squares regression estimates shown partial (b) and standardized (beta) coefficients predicting the probability of satisfaction with democracy. See Table 2 for details of variables and scoring. N=56,452.

Source   CSES combined (module 1 and module 2) dataset, for the thirty countries listed in the Appendix Table.

In section 1 we outlined three such mechanisms relating specifically to our intra-party variable. The first mechanism was a sense of voter efficacy deriving directly from the voting act itself, so that voters in preferential systems felt greater empowerment over the political system, compared to voters in other electoral systems. The second was the degree of linkage between politicians and voters, so that voters in preferential systems had easier access to their elected representatives. And third was ideological tendency within the party political system. In large part, the first of these mechanisms formed the basis of the analysis in the previous section, which examined the direct relationship between the nature of the electoral system and the attitudes of voters towards the political system. The second two mechanisms suggest a more indirect relationship with, in turn, politicians and parties playing key mediating roles. Given the focus of our other electoral system variables (particularly disproportionality and assembly size) on the

aggregate proportionality of the election result, we should add a fourth mechanism of linkage, namely the degree to which the election result is perceived as fair.

Taking our (remaining) three mechanisms together, therefore, we have the basis for an examination of the how electoral systems link with voter attitudes to democracy. In the first instance, there are voter attitudes to the role of political parties. We would expect that the more open the system is to minor parties and independents, the greater the support for parties as an organizing element within the political system. Conversely we might expect a negative relationship between our intra-party variable and parties, reflecting a greater emphasis on candidate-centred voting. Second, the extent to which voters believe that their elected representatives were responsive to and knowledgeable about their needs should be related to smaller assembly sizes, to the lower ratios of elected representatives to electors and also to the nature of the ballot structure. Third, we would expect that the perceived fairness of the electoral system would be a consequence of disproportionality and possibly also the assembly size. In this case we might expect that more proportional systems will be associated with greater support for the view that the election was fair. The perceived fairness could also be related to ballot structures, in the sense that voters in candidate-centred systems might feel a greater sense of 'ownership' over the electoral process due to their determination of the fate of individual candidates.

Questions measuring these three dimensions were asked in the first CSES module and are shown in Table 4. Unfortunately, the questions were not asked in the second CSES module, and for that reason the results presented in Table 4 and Figure 3 are based on 27 countries, and exclude Ireland, Bulgaria and France. In most countries, political parties are regarded as necessary in order to make the system work; almost half of the respondents in Table 4 support this proposition, and just one in 10 hold the opposing view. Similarly, just over half see the last election in their country as having been conducted fairly; once again, just one in 10 of the respondents take a negative view. Opinions are more evenly balanced on whether or not elected representatives know what ordinary voters think; while one-third take a neutral view, 40 percent believe that they are not in touch compared to 27 percent who believe they are.

Table 4: Attitudes Towards the Political System

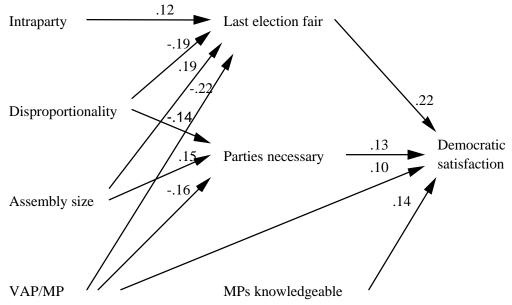| Political parties necessary?		Elections conducted fairly?		MPs know what people think?	
1. Necessary	47	1. Fair	55	1. Know	9
2.	26	2.	22	2.	18
3.	17	3.	14	3.	32
4.	5	4.	5	4.	22
5. Not necessary	5	5. Unfair	4	5. Don't know	18
Total	100		100		100
	(47,060)		(39,997)		(42,469)

Source CSES module 1.

Notes The questions were: 'Some people say that political parties are necessary to make our political system work in [country]. Others think that political parties are not needed in [country]. Using the scale on this card, (where ONE means that political parties are necessary to make our political system work, and FIVE means that political parties are not needed in [country]), where would you

place yourself?' 'In some countries, people believe their elections are conducted fairly. In other countries, people believe that their elections are conducted unfairly. Thinking of the last election in [country], where would you place it on this scale of one to five where ONE means that the last election was conducted fairly and FIVE means that the last election was conducted unfairly?' 'Some people say that members of [Congress/ Parliament] know what ordinary people think. Others say that members of [Congress/Parliament] don't know much about what ordinary people think. Using the scale on this card, (where ONE means that the members of [Congress/Parliament] know what ordinary people think, and FIVE means that the members of [Congress/ Parliament] don't know much about what ordinary people think), where would you place yourself?

These attitudes are related to the objective aspects of the electoral system in the path model in Figure 3, and to satisfaction with democracy. All paths control for (but do not show) the range of voter and country characteristics in Table 2. The first finding from the model is that political attitudes do indeed act as a mediating influence between the objective characteristics of the electoral system and satisfaction with democracy; a range of paths lead from these characteristics to attitudes, and then from the attitudes to satisfaction with democracy. By contrast, there is only one direct path between the electoral system characteristics and democratic satisfaction, which shows that, as we would expect, the closer the voter is to the MP, the greater the sense of satisfaction with the system. In other words, the closeness to the elected representative has both a direct and indirect effect on the popular sense of satisfaction. Nevertheless, what the results confirm is that the electoral system characteristics are indirectly related to democratic satisfaction, and their effects operate via a series of political attitudes that voters form about how the system functions.

Figure 3: A Model of Democratic Satisfaction, Attitudes and Electoral System Characteristics

Notes Path model based on OLS regression equations and showing standardized (beta) coefficients. Only paths with betas >.10 or better are marked. Variables are defined in Tables 2 and 4. All paths control for (but do not show) the voter and country characteristics in Table 2.

Source CSES module 1.

In terms of the detailed results, the fairness of the last election is predicated, as noted above, on having a lower ratio of electors for each elected representative; fairness is also associated with greater proportionality, as we would expect, and with a larger assembly size. Most importantly from our perspective, candidate-centred electoral systems lead to a significantly stronger perception of fairness. The intra-party measure does not emerge as a significant predictor of the other two attitudes, although each of the other three electoral system variables is important, in differing ways. Seeing parties as necessary is shaped by having a more proportional system, and by a larger assembly and a lower voter/representative ratio; viewing elected representatives as knowledgeable is shaped by much the same elements. All three of these attitudes about the political system are, in turn, strong predictors of satisfaction with democracy, as we would expect. The importance of voters seeing the last election as having been conducted fairly is the largest effect, and is about equal in importance to the other two attitudes combined.

Overall, then, the path analysis presented in Figure 3 provides additional support for the argument that electoral systems do indeed affect levels of voter satisfaction with democracy, and in this instance we have evidence of the nature of the linkage between these two sets of variables. The slightly disappointing result for our intra-party variable may partially be due to our reduced sample size (given that we had to exclude three countries used in the analysis in the previous section), but in large part it most likely reflects the much stronger effects of the more commonly used electoral system measures, particularly disproportionality and assembly size. Nevertheless, the results do show that the intra-party nature of the electoral system has an impact on popular perceptions of electoral fairness and via that to satisfaction with democracy (remembering that this was the most important of our three linkage variables in Figure 3). While this analysis provides further support for the argument that the 'macro' measure of systemic proportionality is the most important electoral system feature, there are also grounds for arguing that the 'micro' aspects of electoral systems—in this case the intra-party dimension affected particularly by the ballot structure—have a role to play, and our analysis in Table 3 shows that this role is far from being insignificant.

Conclusion

With the mushrooming of new democracies over the past few decades, electoral engineering has become big business. On an ever-increasing basis, political scientists are invited to comment on the design of new electoral systems; indeed, this has also included consideration of fundamental reform of electoral systems in established democracies (Italy, Japan, New Zealand, Israel, the UK, etc.). While few today would demur from Richard Katz's contention that the answer to the question which electoral system is 'best' depends on 'who you are, where you are, and where you want to go' (1997a: 308), this has not deterred specialists from proffering advice on where to place greatest emphasis in electoral system design (for a recent illustration, see Taagepera 2002). Among the items that seem to feature in these deliberations, two seem most prominent: (1) the level of overall proportionality of the system, and (2) the nature and degree of linkage between politicians and voters. Certainly, this is seen, by at least some scholars, as a major factor behind the recent fashion for mixed systems, whose principal virtue is apparently that they represent 'the best of both worlds' in terms of these two characteristics (Shugart and Wattenberg 2001).

This paper started from a similar interest in promoting the joint virtues of proportionality and good linkage, although in this case (and in contrast to the more common Lijphartian-inspired

route of most scholars) we have placed even greater emphasis on the latter than the former. Our review of the evidence using CSES data provides firm support for the view that preferential voting can make a difference—in this instance to levels of voter satisfaction with democracy. Using an intra-party measure which identifies the main characteristics of preferential system, our comparative analysis has shown that such systems promote a greater sense of fairness about election outcomes among citizens, which in turn is a major component of the public's satisfaction with the democratic system. Electoral engineers being asked to comment on electoral system design for the next new democracy (or, for that matter, established democracy engaging in a major overhaul of its electoral institutions) might want to take note.

Endnotes

[1]   Critics of this feature argue that it brings with it voter confusion and the risks of voting paradoxes; see e.g. Dummett (1997).

[2]   We lack sufficient detail on all the CSES cases to replicate Shugart's other index of 'inter-party efficiency'.

[3]   Since these selection rules are not readily available for all the countries in the CSES sample, our coding is more akin to that of Carey and Shugart (1995: 420-21).

[4]   We add the subscripts to distinguish between the Carey and Shugart (1995) codes and the Shugart (2001) codes.

[5]   In a footnote, Carey and Shugart give due recognition to the fact that list systems can vary in terms of ordinality, but in this paper they 'do not attempt to capture these sorts of variation' (1995: 435).

[6]   We have discussed our coding privately with Matt Shugart, and there is general agreement that, were SNTV to still be a relevant system requiring coding in this analysis, then this *Vote* component would need further refinement to take account of the distinction between SNTV and SMP (and other nominal categorical) systems. Under Shugart's schema, they are coded together on this component, but whereas it would be correct to locate SNTV further on the extreme on this dimension than STV, this would not be the same for SMP. Given that we are not dealing with SNTV systems in the analysis that follows, we shall simply leave them out of consideration here.

[7]   It is interesting to note how for Shugart intra-party competition does feature in the case of this component even if its significance tends to be downplayed for the other components.

[8]   The thirty countries are listed in Figure 1 and the Appendix Table. Of the thirty countries, 27 were derived from module 1 of the CSES dataset (http://www.umich.edu/~cses/), and three (Bulgaria, France and Ireland) from module 2. Note that we are only including democratic countries in our CSES sample (based on the usual freedom house scores). A merged dataset was created from the common items of interest in the two datasets. A merged dataset was created from the common items of interest in the two datasets. The fieldwork dates for the surveys are shown in the Appendix Table. Belgium was separated in module 1 between Flanders and Walloon; in our analysis the two samples are combined.

[9]   The satisfaction question was: 'On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the way democracy works in [country]?' Very satisfied was scored 10, fairly satisfied 6.7, not very satisfied 3.3, and not at all satisfied 0. This coding was used to assist with interpretation.

[10]   A range of additional socio economic variables were examined in the preliminary analyses, but eventually excluded because they added little or nothing to the explanatory power of the model.

[11] $GI = \sqrt{\{[\sum(v-s)^2]/2\}}$

[12]   An additional control variable would be number of elapsed years since the last election, on the grounds that respondents who had voted most recently would be more satisfied than voters with more distant memories of the event. However, since the CSES data are based on national election surveys, in almost all cases the elapsed time since the last election was zero.

[13]   The correlation of -.11 is smaller than the correlation of -.32 noted earlier because the units of analysis in the first calculation are 56,453 individual respondents and in the second equation, 30 countries.

[14]   Another possibility is that there are country-specific variations, above and beyond the variables controlled for in model 4, which account for the differences. Several multilevel models were estimated to test the random and fixed country effects. However, the thirty countries were too closely correlated with the electoral system and country specific variables in order to follow this line of enquiry further.

[15]   This is consistent with previous studies that have considered indirect causal effects between electoral systems and measures of democratic satisfaction. For instance, Anderson and Guillory (1997) and Norris (1999) assess the mediating role of being losers or winners in a polity as the basis for their examination of the relationship between electoral institutions and levels of democratic satisfaction.

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Appendix Table: Electoral Systems Data

	Intra-party dimension coding				Other electoral system variables		
	Ballot	Vote	District	Index	Disproportionality[a]	Assembly size	VAP per MP
Australia (1996)	4	5	2	8.6	10.62	148	91500
Belgium (1999)	2	2	1	2.9	3.12	150	53300
Bulgaria	1	1	1	1.4	7.09	240	26632
Canada (1997)	1	3	2	4.3	15.77	301	78300
Czech Republic (1996)	2	2	1	2.9	4.44	200	39300
Denmark (1998)	2	4	3	7.1	1.85	179	23000
France	3	3	2	5.7	21.37	577	77160
Germany (1998)	-	-	-	3.6	3.38	656	100000
Hungary (1998)	-	-	-	4.7	7.65	386	20000
Iceland (1999)	1	1	1	1.4	2.13	63	3120
Ireland	4	5	3	10.0	5.39	166	16155
Israel (1996)	1	1	1	1.4	2.50	120	30700
Japan (1996)	-	-	-	3.6	10.78	500	193400
Korea (2000)	-	-	-	3.6	8.84	299	114900
Lithuania (1997)	-	-	-	4.7	7.18	141	21600
Mexico (2000)	-	-	-	3.6	7.08	500	110800
Netherlands (1998)	2	2	1	2.9	1.58	150	80000
New Zealand (1996)	-	-	-	3.6	4.36	120	21400
Norway (1997)	1	1	1	1.4	3.92	165	20000
Poland (1997)	2	2	1	2.9	6.36	460	60700

	Intra-party dimension coding				Other electoral system variables		
	Ballot	Vote	District	Index	Disproportionality[a]	Assembly size	VAP per MP
Portugal (2002)	1	1	1	1.4	5.07	230	38619
Romania (1996)	1	1	1	1.4	8.50	343	48800
Slovenia (1996)	2	2	1	2.9	1.49	90	17000
Spain (2000)	1	1	1	1.4	6.36	350	88600
Sweden (1998)	2	2	1	2.9	2.13	349	19800
Switzerland (1999)	2	4	3	7.1	3.62	200	28700
Taiwan (1996)	-	-	-	3.6	3.14	334	42900
Thailand (2001)	-	-	-	3.6	6.74	500	85000
UK (1997)	1	3	2	4.3	15.19	659	68400
USA (1996)	3	3	2	5.7	4.47	435	436700

a   Gallagher index. For most OECD cases, we provide decennial averages for the 1990s; in all other cases the most recent election. (For the assembly size and voting age population data, we report the trends for the most recent election.)

Sources   Bowler et al. 2003; Farrell 2001; Norris 2002; Rose 2000; http://www.essex.ac.uk/elections/; www.idea.int; www.electionworld.org; http://psephos.adam-carr.net.