

The Intraparty Dimension and Legislative Representation

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1. Research problem

One of the central questions in the study of democratic representation is the tradeoff between the articulation of national vs. local issues. The relative balance of national and local representation is affected by various factors, but one crucial factor is the electoral system, and more specifically the “intraparty dimension” of the electoral system. Just as electoral systems affect the concentration or dispersion of authority across parties (the interparty dimension), they also affect the concentration or dispersion within parties (Shugart 2001). They do so by affecting the degree to which candidates for legislative office cultivate a “personal vote” or a “partisan vote.” A personal vote is generally defined as that portion of the vote derived from a politician’s personal characteristics, experience, or record of service to a constituency (Cain, Ferejohn, and Fiorina 1987). It is thus a private good, in that it represents a return to the candidate derived from advertising his or her own qualifications for election or reelection. A partisan vote represents the return to the candidate from his or her party affiliation. The partisan vote is thus a collective good, shared by all candidates who bear the party label (Cox and McCubbins 1993).

The reason that the incentive to cultivate a personal vote is important to the balance of national and local interest representation lies in the different ways in which parties and their candidates tend to seek votes. Whereas parties are aggregators of interests and typically seek to win representation in multiple regions of the nation, individual candidates often articulate more narrow interests. The personal vote may be based on either behavior—for instance, providing casework or sponsoring “pork” bills for constituents—or attributes such as various occupational, experience, or other “profiles” that set them apart from one another, or from their party as a whole. The extent to which candidates have an incentive to cultivate a personal vote, and the extent to which parties have an incentive to nominate candidates with diverse characteristics and profiles that appeal to constituent subgroups, is expected to vary with specific institutional variables on the intraparty dimension of electoral systems.

This proposed project has three principal research phases:

- Further collection, coding, and analysis of data on countries for which the PI has undertaken preliminary research, drawing on the biographies of legislators in eleven countries. The data include legislators’ places of birth, prior political experience, and occupations;
- Collection and analysis of original biographical data on legislators from selected additional countries as well as data on district characteristics (especially populations of the municipalities that are located within districts);
- Collection, coding, and analysis of electoral data at the candidate level from a wide cross-section of democracies, both established and developing.

The ultimate objective of the project is to contribute to the literature on how electoral systems shape the nature of representation in democracies, to provide a data set on the intraparty dimension of electoral systems that will be available for future research by other scholars, and to provide more reliable guidelines for political practitioners to follow when designing or reforming electoral rules for new or established democracies, including the United States.

2. Theoretical considerations and existing literature

2.1 National vs. local representation

Pitkin's (1967) much-cited study of representation refers to the goal of striking a balance between the national and the local as the "classical dilemma" of representation. Going a step farther, King (1990) claims that the goals of national and local representation are "inherently incompatible." Other scholars have drawn attention to the dilemma between responsiveness to local interests and the articulation of national policy programs (Cox 1987, Fiorina and Noll 1987, Powell and Huber 1989, Shugart and Carey 1992, Ramseyer and Rosenbluth 1993, Powell 2000, Cox and McCubbins 2001).

This representation dilemma is closely related to the relative strength of political parties. Various analysts and reform advocates have considered strong (i.e. disciplined or cohesive) parties to be the agents of national and programmatic representation (e.g. Hare 1859, Mill 1861, "Towards a More Responsible Two Party System" 1950; David 1992, Sundquist 1986, Shugart and Wattenberg 2001). Candidates, on the other hand, have been conceived of as agents of local or otherwise more parochial representation. Where candidates have greater autonomy from their parties, such as where they have the incentive to cultivate a personal vote that sets them apart from their party's collective reputation, they often build their record through parochial appeals to localities, interest groups, or the provision of "pork-barrel" favors (Mayhew 1974, Fenno 1978, Fiorina and Noll 1979, Ramseyer and Rosenbluth 1993, Ames 1995). Appeals to parochial interests give a legislator a higher probability of being able to claim credit for his or her personal interventions in the policy-making process, unlike the provision of public goods, for which the legislator has fewer prospects for gaining personal electoral credit, due to their non-exclusive character (see Fiorina and Noll 1987).

2.2. The personal vote and the intraparty dimension of electoral systems

Mayhew's (1974) discussion of the 'electoral connection' is a seminal work on the personal vote and its effects on legislative behavior. Mayhew argues that American elections encourage members of Congress to focus on providing goods and services targeted to their own district in order to claim credit personally on behalf of their constituents come next election. In the American case, the institutions that support this quest for personal votes are single-seat districts (SSDs) and primary elections. However, not only SSDs but also proportional representation and other types of electoral systems often have institutional features that generate an incentive to cultivate a personal vote.

Some of the variables on the intraparty dimension of electoral systems are the same as those on the more familiar interparty dimension (Shugart 2001). For instance, for many decades, political scientists specializing in electoral systems have drawn a distinction between single-seat district plurality systems and multi-seat district proportional representation (PR) systems. The dependent variables in these studies have usually been the number of parties, proportionality, or related characteristics regarding the concentration or dispersion of political power *across* parties (Rae 1967; Taagepera and Shugart 1989; Lijphart 1984, 1990, 1999; Powell 2000).

On the intraparty dimension, the questions concern the concentration or dispersion *within* parties. As a general rule, the concentration of intraparty authority can be expected to be inversely correlated with the extent of legislators' contacts with constituents. For instance, other things equal, single-seat district systems foster more contact between constituents and legislators (or legislative candidates) than do those proportional systems in which voters are voting only for a "closed" party list. In the single-seat district, each legislator is uniquely responsible for a discrete geographically defined constituency, and thus members (and candidates) are expected to maintain regular contacts with constituents.

The intraparty dimension does not simply set SSD systems against PR, however. It is a variable within PR systems as well. In fact, the variation within multi-seat district systems—including PR—is probably far more important on the intraparty dimension than is the variation between SSDs

and PR. Open-list proportional systems provide candidates with an opportunity to seek their own individual preference votes, which then determine the order in which candidates are elected in multi-seat districts. The competition within the party for preference votes provides an incentive for candidates to maintain contacts with groups of voters, because candidates who gain popularity with voters can be presumed to be more likely to obtain sufficient preference votes to be elected than those that fail to gain or maintain popularity. Open lists thus imply a far greater dispersion of authority within parties than do SSD systems, because in the latter, candidates of the same party are not in competition with one another at the general-election phase, while under open lists they are. In SSD systems, as under closed lists, the identity of the candidate(s) and the party are fused. However, in open lists or any other systems that give voters a choice of candidates within a party, candidates can not simply rely on their party label. Candidates need another basis on which to attract votes—a personal vote. Moreover, parties need to provide their candidates with a basis to attract personal votes, because parties with unattractive candidates may expect to obtain fewer votes than parties that have higher quality candidates.

Further variations in electoral systems also have an impact on the intraparty dimension. Non-list formulas are those in which candidates win seats exclusively based on their own individual votes, rather than on the basis of their party's collective performance (as under closed lists) or a combination of collective and individual votes (as in open lists). Single-seat district systems represent one common type of non-list electoral system. When employed in multi-seat districts, non-list rules pit candidates of the same party against one another, but without the partial tying together of their fates provided by the pooling of votes across the list in open-list PR. Thus non-list systems in multi-seat districts greatly enhance the premium on maintaining a constituency base separate from that of the party. Examples include the single nontransferable vote formerly used in Japan, and still used in Taiwan. Finally, various "mixed-member" electoral systems, in which some members are elected by non-list rules (usually SSDs) and others from party lists, can be expected to have more complex effects on the incentives of candidates.

Carey and Shugart (1995) suggested how different electoral formulas affect personal vote-seeking incentives (PVSI). Their hypotheses speak to the interaction of intraparty competition (electoral formula) and district magnitude (i.e., the number of legislators elected from the district). Together, they constitute a hypothesized *differential effect* of magnitude:

- ◆ Under a formula with no intraparty competition, the incentive to cultivate a personal vote decreases as magnitude increases;
- ◆ Under a formula with intraparty competition, the incentive to cultivate a personal vote increases as magnitude increases.

When there is no intraparty competition, voters are not able to favor some candidates of a party over others. In such systems, if the district magnitude is large, any effort by a candidate on the list to cultivate a personal vote would have an imperceptible effect on the probability of election. Rather, that probability essentially was determined prior to the election, when the party ranked candidates on its list. On the other hand, in low-magnitude districts a small shift in votes may affect the electability of at least the marginally ranked candidates, implying that those who cultivate a personal vote may draw additional votes to the party, and thereby enhance their prospects for election.

In formulas that provide the voter with an intraparty choice among multiple candidates the relation between magnitude and the incentive to cultivate a personal vote is reversed. When preference votes determine candidates' order of election, the higher the magnitude, the more copartisans they are in competition with, and thus the higher the premium on emphasizing connections with groups of constituents. In such a context, a candidate's emphasis on his or her personal attributes or record of service may attract preference votes away from copartisan, or even from voters who might otherwise prefer a different party.

2.3. Existing empirical studies and extensions

Most existing literature on PVSI analyzes aspects of the behavior of legislators. For instance, comparative studies have looked at the propensity to maintain constituency offices under different electoral formulas and districting arrangements for election to the European Parliament (Bowler and Farrell 1993), campaign-finance practices by Japanese candidates under varying district magnitude (Cox and Thies 1998), party discipline in Brazil's open-list system in districts of varying magnitude (Carey and Reinhardt 2004), and the probability that a legislator would initiate a bill targeted locally in Latin American legislatures (Crisp et al 2004). Another approach is not to analyze personal vote-earning behavior once in office, but rather personal vote-earning *attributes* that legislators bring to the campaign before they even get elected the first time, such as birthplace, prior electoral experience, and occupation.

Collecting and analyzing data on personal vote-earning attributes (PVEA) are the principal objectives of this proposed grant, along with data on the districts themselves (e.g. population of municipalities) and basic intraparty electoral data (e.g. candidate-level votes in systems with intraparty competition, list rank in any list system). Analysis of PVEA has advantages over behavior in that attributes are not subject to manipulation so easily, if at all, once a legislative career is underway, as is behavior. Moreover, opportunities for engaging in constituency-oriented behavior are conditioned by legislative rules (e.g. whether private-member's bills are permitted, committee structures, etc.), whereas a given politician either has or does not have a given attribute. Data on PVEA will constitute the dependent variables in most of the analysis in this project, with PVEA expected to vary to the extent that formula and magnitude affect PVSI. Intraparty votes and list-rank data will allow a finer-grained analysis of independent variables concerning the degree of competition faced by specific legislators; such data will also serve as dependent variables in very basic analysis of the impact of various electoral rules on the relative competitiveness of intraparty politics. Data on populations of municipalities will allow for an investigation of the representation of different geographic subgroups within the district. Existing and planned tests are discussed in the remaining sections of this project description. The PI has undertaken research on the relation between electoral rules and PVEA, an overview of which is provided next.

3. Preliminary results of research by the Principal Investigator

Shugart, Ellis, and Suominen (N.d.) hypothesize that candidates are more likely to have a given personal vote-earning attribute (PVEA) the greater the personal-vote-seeking incentive (PVSI) given by the electoral rules. The study by Shugart, Ellis, and Suominen (SES) is, in part, a test of the Carey-Shugart hypothesis of a differential effect of district magnitude in systems with and without intraparty competition. The PVEA studied are two binary dependent variables: Whether a legislator is native to his or her electoral district—denoted *Pr(native)*—and whether a legislator has lower-level electoral experience within the legislative district, *Pr(exper)*. Each of these attributes may serve as a signal of a candidate's commitment to representing the distinct local needs of voters. Thus such PVEA should be more valuable electorally the higher the politician's PVSI. Nativity may be a proxy for a politician's knowledge of local interests, whereas service on a local or regional council is a signal of knowledge of how the political system works and probably implies a politician with an existing base of voters for whom he or she has performed casework or other services in the past.

SES assembled an original data set, relying on publicly available biographies of legislators in eleven countries.¹ These biographies contain information on legislators' personal attributes and career

¹ The research for which preliminary results are reported here was funded by grants from the Center for the Study of Democracy, University of California, Irvine, and the Academic Senate Committee on Research, University of California, San Diego. Both grants were in the form of

experience. In their empirical analysis, SES analyzed personal data on approximately 2,500 legislators. Table 1 indicates the eleven cases from which data have been gathered thus far, grouped according to list type—open or closed—and indicating the election year analyzed, as well as the number of legislators in the database and the district magnitudes of each system. The table further identifies those cases classified by SES as “established democracies,” with approximately twenty five or more years of democracy. The other cases were classified as developing democracies, and were analyzed separately, on the grounds that where institutions are less familiar or in flux, parties less institutionalized, and careers in democratic politics necessarily shorter, patterns of PVEA may be distinctive from the established democracies.

Table 1. Cases analyzed by Shugart, Ellis, and Suominen

<u>Open-list</u>	<u>Year of election</u>	<u>N</u>	<u>District magnitude</u>	
			<u>(range)</u>	<u>(mean)</u>
Brazil	1998	538	8–73	19.9
Estonia	1999	101	8–13	9.2
Finland*	1999	200	1–32	13.3
Luxembourg*	2003	60	7–23	15
Poland	2001	461	7–19	11.2
Switzerland*	1999	200	1–34	7.7
 <u>Closed-list</u>				
Dominican Rep.	1998	150	1–45	5
Israel*	1999	120	one dist.	120
Norway*	2001	164	4–16	8.6
Portugal*	2000	230	2–49	10.5
Spain*	2000	349	1–34	7

*denotes “established democracy”

The statistical models employed to test the propositions are of the following form:

$$PVEA = a + b_1(\log M) + b_2(\log M * open) + b_3(open) + \epsilon,$$

where *PVEA* is a personal vote-earning attribute, operationalized as $Pr(native)$ or $Pr(exper)$, each a binary dependent variable.² $\log M$ is the decimal logarithm of district magnitude.³ *Open* is a dummy variable that takes the value of 1 if the list is open and 0 if it is closed, and ϵ is the error term. The expectation is that b_1 is negative, and b_2 positive (and significant). The slope of the effect of magnitude in closed lists is thus given by b_1 (i.e., when *open*=0), while the slope of the effect of magnitude in open list systems is the sum of b_1 and b_2 , which should be positive. A χ^2 test should reveal that the difference of slopes is significant. There is no expectation regarding the coefficient on b_3 , because the theory speaks not to list type, per se, but to its interaction with magnitude. Alternative models were

“seed money” to explore the plausibility of the NSF grant herein proposed. Shugart’s coauthors are a recent Ph.D. and a Ph.D. candidate at the University of California, San Diego.

² The mean of $Pr(native)$ within the established democracies is .62 (standard deviation .48). The mean of $Pr(exper)$ within the established democracies is .61 (standard deviation .49).

³ The mean of $\log M$ in the sample of established democracies is 1.06; the standard deviation is .33. Among closed lists, its mean is 1.03 (standard deviation .34); among open lists, 1.11 (.29).

also tested with country-dummy variables in place of the open-list dummy.⁴ SES estimated models using probabilistic regression (probit). Because of possible non-independence of the observations, they are clustered by district.

Table 2 shows the results of the basic models (with and without country dummies, and for each dependent variable) for the set of established democracies, not including Israel.⁵ The coefficients, b_1 and b_2 , provide support for the hypothesized differential effect of magnitude on each indicator of PVEA. The findings are robust to specifications with or without the country dummies, as the coefficients barely change when fixed effects are controlled for.

Table 2. Effects of magnitude and list type on personal vote-earning attributes of legislators, established democracies

Dependent variable: Probability that legislator...	...is native to district	...has lower-level electoral experience		
<i>Independent variables</i>				
District magnitude (logged)	-.49*** (.11)	-.51*** (.13)	-.31 (.22)	-.45*** (.17)
District magnitude (logged) * open-list dummy	.63** (.29)	.69** (.33)	.92*** (.31)	1.04*** (.27)
Difference of means: χ^2	20.01	15.24	9.19	15.26
Prob> χ^2	0.0000	0.0005	0.0101	0.0000
Open-list dummy	-.43 (.34)	--	-.22 (.35)	--
<i>Country dummies (Spain dropped)</i>				
Finland	--	-.43	--	.32
Luxembourg	--	-.50	--	-.14
Switzerland	--	-.33	--	-.02
Norway	--	.36**	--	1.43***
Portugal	--	.10	--	.49***
Constant	.74*** (.14)	-.66*** (.15)	.34 (.21)	
N	1128	1128	1162	1162
Log pseudo-likelihood	-736.256	-731.829	-728.766	-664.917
Wald χ^2	32.58	43.19	59.74	233.76
Prob> χ^2	0.0000	0.0000	0.0000	0.0000

Robust standard errors in parentheses (omitted for country dummies)

* $p \leq .10$, ** $p \leq .05$, *** $p \leq .01$

⁴ List type is a fixed effect of a country for all the cases in SES (and most countries in the world), and as a result, an extreme degree of multicollinearity results if we attempt to include both the list-type dummy and country dummies in the same equation.

⁵ Israel is excluded for two reasons. First, the concept of district nativity is meaningless in a country that consists of a single district. Second, its outlier magnitude (and the absence of a similarly high magnitude among the open lists) means that the observations from this one case would drive the results if it were included. Israel remains of theoretical interest precisely owing to its high magnitude, and thus it will be included in this research, even if not in specific regression equations.

In order to visualize the effects more readily, Figures 2 and 3 show the effects for Pr(native) and Pr(exper), respectively, based on simulations under the *Clarify* program. In both cases, the model chosen for simulation is the model with the open-list dummy. The simulation represents magnitudes ranging from five to forty. Only about ten percent of the observations occur in magnitudes smaller than five—not surprisingly, given that these data come from PR systems. In the case of Pr(native) the mean estimates for the two list types are approximately identical at M=5, and then diverge. The 95% confidence intervals diverge after M=12. In other words, for district nativity, it is not possible to distinguish open and closed lists at magnitudes smaller than 12. There is increasing scatter on open lists at magnitudes greater than about 20, but the open-list data remain distinct from the closed. Figure 3 suggests that the differential effect of magnitude is actually greater for Pr(exper) than for Pr(native), in spite of the insignificant coefficient on the uninteracted logM term that was reported in Table 2.⁶ At M=5, not only is the open-list mean higher than the closed-list mean, but also the 95% confidence intervals are already diverging.⁷

SES also undertook analysis on the newer democracies in their data. These regressions are not shown here for reasons of space, but their results are worth noting briefly. On Pr(native), the hypothesized effects were supported in this sample (as well as in a pooled sample of both established and developing democracies). However, the sample of developing democracies did not perform as hypothesized in the case of Pr(exper). Unfortunately, complete data on prior experience were not included in the available biographies for two of the countries in the SES sample (Estonia and Poland), so it was not possible to determine whether the developing democracies simply are different in terms of the relation of electoral rules to Pr(native), or whether the negative results are obtained only because of missing observations. Thus one of the priorities of this proposed research is to collect the missing data, as well as to expand to more developing (as well as established) democracies.

Finally, the PI has also undertaken some preliminary data analysis related to the relationship between list rank and experience-related PVEA within the established democracies. For reasons of space, these results are not shown here, but they suggest that list rank is indeed related to PVEA. For example, results suggest that prior service on a municipal council is more likely in open lists in the more marginal list positions (as determined by preference-vote rank), which may signify that their municipal experience is valuable only to a narrow group of voters within the district. On the other hand, under closed lists, municipal service is less common overall, but more likely in the higher ranks. Perhaps this is because only those with experience in large municipalities are likely to obtain nominations under closed lists, and they are put high on the list because their experience makes them widely known. Such questions can be answered only with the collection of more data, including data on the populations of the municipalities in which individual legislators obtain their lower-level electoral experience.

The preliminary findings reviewed here provide support for the expectation that personal vote-earning attributes vary with electoral rules. More data—both time series and a larger cross-section—are needed to develop a deeper understanding the relationships and to extend the analysis to other types of electoral system, as well as to test for other effects not thus far analyzed. The next section of

⁶ The simulation reveals that the insignificance of the negative sign on that term is a result of increasing scatter at higher magnitudes in closed-list systems. However, at M=40 even the upper bound for Pr(exper) in closed lists is lower than it is at M=5, and far lower than the lower bound of the estimate for open lists.

⁷ Shugart, Ellis, and Suominen also report models based on a subset of the established-democracy legislators who had not served in the previous term of the legislature. They expected that PVEA would be even more important for these legislators than for those who were incumbents at the previous election, because the newly elected lack the opportunity to cultivate a personal vote via constituency-oriented legislative behavior. The results supported the hypothesis.

this proposal turns to plans for extending this research to more elections from some countries and additional countries.

Figure 2. Relationship of district magnitude to probability that legislator is native to his or her district, established democracies

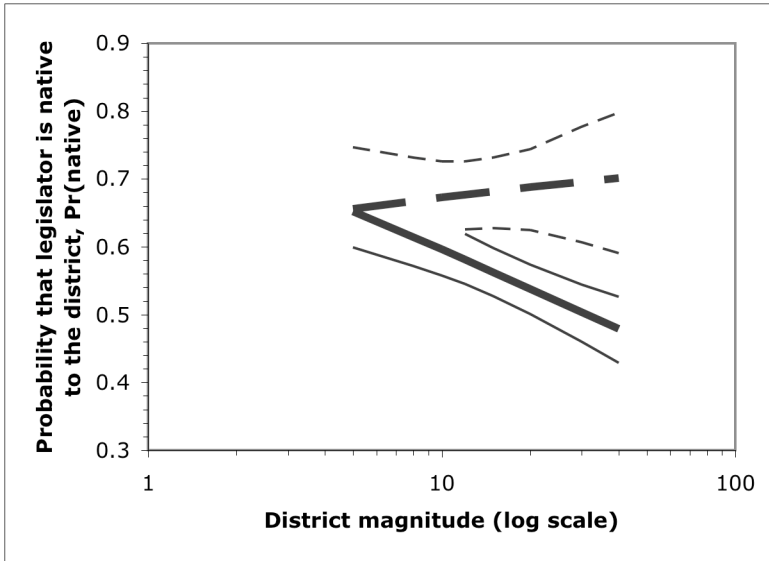
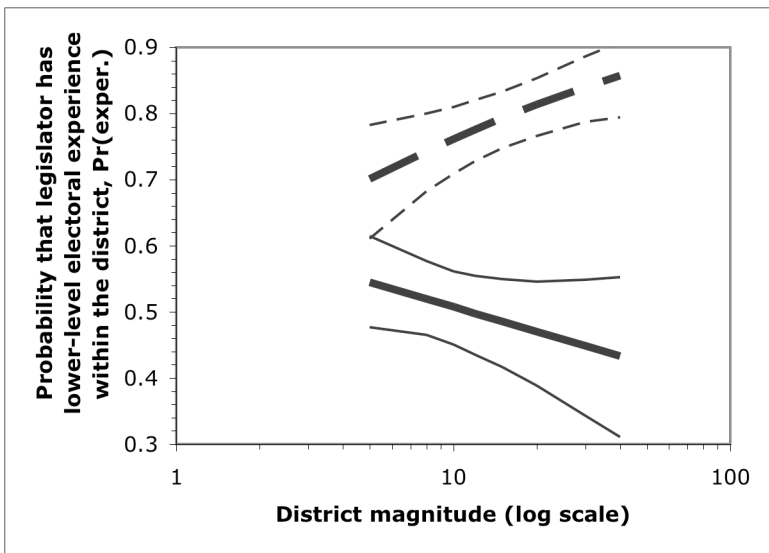


Figure 3. Relationship of district magnitude to probability that legislator is experienced in lower elective office, established democracies



4. Furthering understanding of the intraparty dimension

4.1 Research plan

The ongoing research by the PI of this proposal has raised additional questions that justify the support sought in this proposal. The existing research has been confined to eleven cases—and a single legislature in each—with relatively simple forms of list-based proportional representation, and to two binary dependent variables. The proposed extensions consist of three distinct phases, as follows:

- (a) Additional data collection and coding on the existing eleven countries;
- (b) Extending data collection and analysis to new cases;
- (c) Collection of basic intraparty data on both existing and new cases.

4.1.a. Further data collection and analysis on countries already studied

The highest priorities are to collect additional data on the eleven countries included in the data set analyzed by SES. A high priority will be given to filling in gaps in the data from the existing cases (e.g. electoral experience data for Poland). Data on municipal populations are missing for all cases. Another early priority is to attempt to locate data on losing candidates for some of the cases. The amount of additional data needed to analyze losing candidates is enormous, and it is unlikely to be feasible over a wide range of cases⁸; however, the PI will prioritize a “core group” of the established democracies for such data: Finland and Switzerland (open list) and Portugal and Spain (closed list). Data on losing candidates would allow for tests such as whether the entire pool of candidates in open-list systems is overwhelmingly native and experienced, or whether voters are giving their preference votes to native and experienced candidates over others lacking such attributes. Also from this core group of cases, a three-election time series will be sought. A time series would allow for analysis of trends (including rates of renomination/reelection) and changes in vote shares or list ranks between elections.

Existing biographical data collected from the eleven cases contain a wealth of information that would elaborate the understanding of the personal vote, and which can be augmented by additional data to be collected. For instance, the data permit more nuanced indicators of the birthplaces and prior electoral experience of legislators than the binary variables currently coded from the raw data. For instance, with the collection of data on the populations of the municipalities in which legislators were born or obtained their electoral experience, it would become possible to understand the degree to which legislators under high PVSIs have connections to greater numbers of communities and smaller communities within the district. A hypothesis might be that higher PVSIs means that parties and their candidates expand the pools in which candidates of the same party fish for small numbers of votes. Additionally, the data in the PI’s possession include the occupations and previous non-electoral positions of legislators, but these data have yet to be analyzed. They may provide relevant clues to the interest-group connections of legislators, data that will be augmented by additional information the PI hopes to be able to obtain from the employment of consultants in various countries (as discussed in the budget justification).

More detailed coding of data already collected, and collection of municipal population data is expected to be completed within the first three months of the grant period. Collection of more nuanced

⁸ For instance, in a 10-seat district, just the winning candidates obviously would provide 10 data lines. However, assuming four parties won at least one seat in such a district and each one nominated 10 candidates, data on losing candidates would mean a four-fold increase in data points just in that district, and without even including parties that presented lists but won no seats.

data on the interest-group affiliations of legislators will continue through the later phases of the grant period.

4.1.b. Extending data collection and analysis to new cases

In the PI's previous research on the intraparty dimension and the personal vote, data collection was deliberately restricted to "simple" proportional electoral systems, those that are clearly open-list or closed-list and those in which most or all seats are allocated within a single tier of districts. However, the world of electoral systems is almost infinitely more complex. For instance, many proportional-representation systems employ hybrid lists that are not purely closed or open. Typically referred to as flexible lists, these lists permit voters to cast one or more candidate preference votes, but unlike with open lists, there is a fixed list order that may be altered only in the event that some candidate or candidates obtain a legally stipulated quota of preference votes, or that a given share of the party's voters indicate preferences. In addition to these hybrid lists, many PR systems do not allocate seats exclusively at the district level, but in two (or more) tiers of allocation. Prominent among these more complex systems are the mixed-member systems (Shugart and Wattenberg 2001), where about half of the legislature is elected in single-seat districts and the rest by PR, but many pure PR systems also contain two or more tiers of allocation. These more complex systems provide theoretically important cases because the hypothesized PVSI of the two tiers may be dramatically different, given the mix of low- and high-magnitude electoral rules in one system. Accordingly, this proposal aims to collect data on various complex systems. It also aims to generate data on non-PR systems, including some countries that use single-seat districts exclusively.

Table 3 indicates a "target list" of twenty five additional countries from which data will be sought from at least one election. The table indicates the type of list or non-list electoral system used by each country (to the best of the PI's current knowledge; sometimes closer inspection uncovers "wrinkles" in the rules that the secondary literature has not identified). Countries were placed on the target list to maximize variation on the independent variables (district magnitude, list type, simple or complex districting, and PR or non-PR formula), and to provide a mix of established and new or developing-country democracies. In the case of countries with major recent changes in electoral system (movement from one list type to the other or from PR to non-PR or vice versa), data initially will be sought only for a pre-reform election (and preferably not the last one prior to reform).⁹ Countries may be dropped if data collection proves to be overly costly, and additional countries may be added, either to replace dropped cases or in the event that data collection proceeds more quickly than expected on the target list.

Included among the non-list systems are those with the single nontransferable vote (SNTV) or single transferable vote (STV). Controlling for district magnitude, these formulas are expected to provide for higher PVSI than are open-list systems, because in the latter there is party-level vote pooling, unlike in SNTV and STV (Carey and Shugart 1995). Also included among the non-list systems are those countries that use exclusively single-seat-districts. To what extent do such systems function as if they were simply list-PR systems with only one candidate per party list, or to what extent are they distinct, both from list systems, and from one another? Questions such as these could be answered with comparative data.

⁹ Ideally, one would want to compare both pre- and post-reform electoral rules; however, such before-and-after analysis is a separate, future project. Before we can interpret the effects of electoral system change on the dependent variables of interest, we must establish the effects of relatively stable electoral rules, using a cross section, and time-series of stable systems.

Table 3. A target list of countries for additional data collection

<u>Country</u>	<u>Type of electoral system</u>
Argentina	Closed list, simple districting
Australia	STV (single-seat districts in lower house; multi-seat upper)
Austria	Flexible list, complex districting
Belgium	Flexible list, complex districting
Bulgaria	Closed list, complex districting
Canada	Single-seat district, plurality
Chile	Open-list, simple districting (all two-seat districts)
Colombia	Single nontransferable vote, simple districting
Czech Rep.	Flexible list, complex districting
France	Single-seat districts, majority-plurality
Germany	Mixed-member
Greece	Open list, complex districting
Hungary	Mixed-member
India	Single-seat district, plurality
Ireland	STV, simple districting
Italy	Open list, complex districting (prior to reform in 1990s)
Jamaica	Single-seat district, plurality
Japan	SNTV, simple districting (prior to reform in 1990s)
Peru	Open list, simple districting
Romania	Closed list, complex districting
South Africa	Closed list, complex districting
Sri Lanka	Flexible list, simple districting
Taiwan	SNTV with complex districting (closed list PR in small upper tier)
United Kingdom	Single-seat district, plurality
United States	Single-seat district, plurality (with primary elections)

This phase of data collection, coding, and analysis will begin immediately, and extend through most of the remainder of the first year. For some countries, data are available, at least for currently serving legislators, on the World Wide Web. In other cases, data are likely to be available in book form via inter-library loan services. Often, however, we expect data to be available only via visits to legislative libraries or electoral commissions in the country in question. Accordingly, the budget that accompanies this proposal includes a line item for paying in-country scholars, graduate students, or other consultants for assistance in collecting (and translating) data on legislators that would not otherwise be available.

4.1.c Collection of basic intraparty data on both existing and new cases

At present, research on the intraparty dimension has been hampered by the absence of basic data. Unlike the interparty dimension, on which votes and seats data by party are now readily accessible, there is no systematic data source currently in existence to reveal the extent of competition within parties in those systems that have such competition. In systems that entail intraparty competition, legislators' own preference-vote totals are crucial, being their ticket to winning a seat or losing. Candidates are likely to vary quite widely in the sizes of their intraparty constituencies. Moreover, some parties may have candidates with more equal personal-vote shares than others. Distributions of preference votes within open or flexible lists are likely to carry important implications for personal-vote strategies. For instance, a party whose list in a given district is dominated by a single "list puller" who obtains the great bulk of the list's preference votes may have a very different profile of PVEA than a list whose winning candidates have approximately the same vote shares. The list-puller likely has attributes that make him or her known to a wide swath of the district (e.g. service in the municipal government of the district's largest city, previously heading a list for a district-wide assembly, national executive service, etc.), while others would be expected to have service or local origins of much narrower appeal. Without basic data on intraparty votes shares, testing these and related propositions cannot proceed. For the countries for which time-series data and data on losing candidates become available, votes data will be useful for exploring the degree to which legislators with small initial votes and PVEA of narrow appeal are able to move up, or whether they tend to retain their marginal positions (or lose). Similar analysis can be conducted for closed-list systems, albeit obviously without individual vote shares. Researchers can seek to correlate various initial PVEA (or their absence) with moving up (or down, or not at all) in the party-provided rank.

The relative absence of basic comparative data on the intraparty dimension hinders our development and testing of theory, including theory regarding the behavior of legislators under different electoral rules, which (as noted above) has been the principal focus of most literature on personal vote-seeking to date. For instance, works on such topics as pork-barreling or legislative-proposal sponsorship are looking at a dependent variable that is at least once removed from the proximal effect of the electoral system. Going directly from electoral system to pork-barreling, for example, is a bit like going directly from electoral system to cabinet durability on the interparty dimension, while ignoring the balance of representation obtained by parties under the electoral rules. That is, it misses the theoretical link of how the mechanical effects of the electoral system generate incentives for politicians to behave in certain ways in order to gain political power. And it largely misses how the electoral system structures choices for voters, and with what consequences. On the interparty dimension, we have votes and seats won by parties. However, on the intraparty dimension we are still largely lacking data on votes and seats by candidates, and on the order in which candidates are elected. For instance, while we have comparative data on the effective number of parties and proportionality under different electoral systems, we generally lack data on the effective number of candidates (relevant to systems with intraparty competition) or the electoral safety or marginality of legislators (relevant to systems both with and without intraparty competition). Such data are crucial to identifying how competitive different electoral systems are inside parties. They are also crucial to building theoretical links between the degree of competition and concentration within parties, on the one hand, and legislators' attributes and behavior (including, but not limited to, strategies aimed at building a personal vote), on the other. The data collection proposed herein promises to offer the discipline a major advance in the availability of basic data on which to build such theoretical and empirical research regarding the intraparty dimension. This phase of the project will begin late in the first year or at the start of the second year.

4.2. Broader impacts

The broader impacts of this proposed research are of at least three forms: (1) The depositing of the data into a publicly accessible database; (2) The professional development of graduate students; and (3) Practical effects regarding potential electoral reform, in the United States and abroad.

The data collected for this project—on the attributes of legislators, populations of municipalities in which they were born or received early electoral experience, and their list rank and preference votes (where applicable)—will be made publicly available at the conclusion of the project period. The data will be stored either on the PI's Web site, or in the existing electronic electoral data archive at the UCSD Library (known as the Lijphart Elections Archive¹⁰).

The project will serve as a vehicle for the professional development of graduate students. Students will be employed as researchers for this project, and their participation is likely to lead to dissertations and publications under their name on related topics. One of the students to be employed is an existing research collaborator with the PI, Melody Ellis, who, as a woman, represents a group that is underrepresented in the profession. Her own independent research is related to this project, and concerns the effects of different electoral systems on the representation of women in national legislatures. Other students will be recruited to work on the project, with priority given to those who would use the data that they help collect in their own research towards the Ph.D.

The findings of this project will have considerable practical implications beyond academic research. For instance, political scientists who specialize in electoral systems are often called upon to advise governments or constituent assemblies regarding the effects of proposed changes to electoral systems. Currently, when political scientists are asked about the effects of various electoral rules on the number of competing parties or proportionality (i.e., the interparty dimension), they have much to offer the practical world. However, on the intraparty dimension, the discipline has much less to offer. Yet there clearly is demand for such knowledge: for instance, in Colombia between 1998 and 2003 there was a major public debate about the pros and cons of open or closed lists; ultimately the congress approved a law allowing parties the option of presenting either type of list (Shugart, Moreno, and Fajardo 2001, Shugart 2003). In Japan, a portion of the upper-house electoral system was changed from single nontransferable vote to closed list, and then to open list. In Austria and Belgium, reductions in the quota of preference votes needed for a candidate to win a seat have recently been implemented, while in Norway, Sweden and the Netherlands official commissions have been charged with considering means to increase the role of preference voting. Even in the United States, there is increasing experimentation at the local and state level—and some interest even at the federal level—in alternative electoral systems, often related to Voting Rights or reapportionment controversies. All of these reforms—or reform debates—could be better informed if political scientists accumulate knowledge about how electoral rules affect the personal vote and other aspects of the intraparty dimension.

¹⁰ The Lijphart Election Archive may be viewed at <http://dodgson.ucsd.edu/lij/>.

Results of prior NSF support

None in past five years

More than five years ago:

Grant No. SES-9208753 (Gary W. Cox, PI)

Publications by Shugart resulting from grant:

With Gary W. Cox, "In the Absence of Vote Pooling: Nomination and Allocation Errors in Colombia." *Electoral Studies* 14, 4 (December, 1995): 441-60.

With Gary W. Cox, "Strategic Voting Under Proportional Representation," *Journal of Law Economics and Organization* 12, 2 (October, 1996): 299-324.