ELECTORAL SYSTEM DESIGN? ASSESSING THE EVIDENCE FOR THE STANDARD ADVICE

Master of Arts in Law and Diplomacy Thesis

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ABSTRACT

A country's electoral system guides how its citizens vote and how those votes are translated into political power, specifically through the allocation of seats in parliament. Many scholars and practitioners of democratization and development promote certain modifications of electoral systems as means to reduce internal conflict, increase women's political participation, and deepen democracy. At the same time, though, some of these very scholars and practitioners recognize the endogenous nature of electoral system change: like any set of rules, these reforms are the outcome of elite bargaining, public pressure, and societal constraints. Unfortunately, this contradiction goes largely unaddressed, and is certainly unresolved, in the literature on electoral systems. In this paper I make an attempt — and I encourage other attempts — to fill this gap. After reviewing the literature on electoral systems, I focus on one supposed outcome of electoral reform, increased women's political participation. Using a System Dynamics computer model, I illustrate the many factors identified by scholars as intermediaries of the effects of electoral systems. Then I turn to an econometric methodology: I replicate the approach of a prominent scholar, and I find both the social science assumptions and the dataset used across the field to be flawed. Finally, I perform a case study of the recent and ongoing electoral reform in Nepal. I find what my earlier theoretical and quantitative research suggested: electoral systems are but a small part of the political process and unlikely to be determinative for any purported outcome. This paper urges caution by both scholars and practitioners against generalizing knowledge about electoral systems and applying it uncritically in each new context.

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1 ELECTORAL SYSTEMS: A FIELD ON SHAKY GROUND

In a 2005 review of the literature on electoral systems, Matthew Shugart reflected on the field's growth over the previous 20 years: "Now, I believe we can speak of a mature field."¹ I disagree. In this paper, I argue that though much has been learned about electoral systems, through political theory, case studies, and quantitative analyses, the advances remain in isolated sub-disciplines. Scholars and practitioners who write about electoral systems' causes rarely mention their effects, and vice versa. Worse, individual scholars often describe electoral systems in completely different ways from one article or book to the next, without acknowledging or addressing the discrepancy. Electoral system scholarship cannot be called a mature field, and the policy recommendations based on this scholarship must be viewed with skepticism, until the disparate lessons learned permeate the various ways in which the field is studied.

This chapter proceeds as follows: First, I define electoral systems and discuss scholars' and practitioners' fascination with them. Second, I address the all-too-common inclination to set normative goals for electoral systems. Third, I describe the types of electoral systems. The possible permutations are too numerous for a review of any length to capture; I therefore highlight the major types only. Fourth, I discuss issues electoral systems do not address, and how actors may supplement or circumvent electoral systems. Fifth, I review the many effects of electoral systems cited in the literature. Sixth, I review what scholars identify as the causes of stability or change in electoral systems. Seventh, I classify scholars of electoral systems along two dimensions: 1) Are electoral systems exogenous or endogenous — that is, can we treat them as independent policy levers to be used for certain ends, or are they rather the products of other

¹ Matthew Soberg Shugart, "Comparative Electoral Systems Research: The Maturation of a Field and New Challenges Ahead," in *The Politics of Electoral Systems*, eds. Michael Gallagher and Paul Mitchell (Oxford; New York: Oxford University Press, 2005), 25.

forces? and 2) Do electoral systems have independent effects? Much scholarship, not all of it recent, has firmly established that electoral systems are indeed endogenous. The central claim of this paper is that this endogeneity should lead us to question claims that electoral systems have independent effects. The policy implication of this statement is clear: rather than concentrating their efforts on reforming electoral systems — in emerging democracies or post-conflict countries, say — international actors should pursue change at a more fundamental level.

What are electoral systems and why are they attractive objects of study?

It is easy to confuse the definition of an electoral system with the purposes ascribed to it. Douglas Rae offers perhaps the clearest definition: "Electoral laws are those which govern the processes by which electoral preferences are articulated as votes and by which these votes are translated into distributions of governmental authority (typically parliamentary seats) among the competing political parties."² Electoral systems must answer three questions: 1) What do voters see and do when they vote? 2) Do all votes have the same meaning, regardless of where they are cast? and 3) How are those votes translated into seats in parliament?³

In answering these questions, each electoral system must specify whether voters vote for individual candidates or for political parties; what the district magnitude is (abbreviated M, how many members of parliament are elected per electoral district); and what formula is used to align proportions of votes with a whole number of seats in parliament. Each of these answers is integrally related with the others, and there is an infinite variety.⁴ But since all electoral systems must answer these three questions, and the answers can be categorized, if not put in numerical

² Douglas W. Rae, *The Political Consequences of Electoral Laws* (New Haven: Yale University Press, 1967), 14. ³ Rae, 16.

⁴ Rein Taagepera and Matthew Soberg Shugart, *Seats and Votes :The Effects and Determinants of Electoral Systems* (New Haven: Yale University Press, 1989), 20-21.

form, electoral systems appear simple to study. Rein Taagepera goes so far as to write, "Studies of electoral systems might supply a Rosetta Stone for some other branches of political science."⁵ The thinking goes, if we can describe electoral systems accurately, so that they can be easily compared to one another, then we can tell what causes them or which components in them lead to which effects, or both.

The perils of normative advice

Scholars of electoral systems often have quite lofty goals for electoral systems. Shugart writes that electoral systems are integral to the functioning of democracies: "The task of a democratic government is to provide a basket of public goods that are preferred over some other basket by as broad a segment of the society as is feasible. It follows, then, that to provide such a link between societal demand and governmental output requires an electoral process that conveys as much information about voter preferences as possible."⁶ Andrew Reynolds sets the stakes even higher: "Freedom and choice are two key parts of dignity and while liberal democracy is not a sufficient condition it is an integral underpinning condition. That is why a well-functioning democracy is the best construct for processing preferences and protecting dignity that humankind has yet developed."⁷

To achieve these goals, scholars and practitioners provide guidelines for the would-be electoral system engineer to follow. Jarrett Blanc, Aanund Hylland, and Kåre Vollan's list covers the most commonly suggested criteria:

- Create representative assemblies, support accountability of the elected members.
- Support stable governments.

⁵ Taagepera and Shugart, 5.

⁶ Matthew Soberg Shugart, "Electoral 'Efficiency' and the Move to Mixed-Member Systems," *Electoral Studies* 20, no. 2 (6, 2001), 174.

⁷ Andrew Reynolds, *Designing Democracy in a Dangerous World* (Oxford: Oxford University Press, 2011), 34.

- Give equal weight to each voter.
- Resist tactical voting behavior.
- Be simple for the voters.
- Be simple for the election administration.
- Be generally accepted by the parties and the public.
- Promote conciliation among different groups.
- Promote cross-community parties.
- Promote dialogue and compromise.
- Be robust against changes.
- Respond logically to changing support. •
- Be sustainable.⁸ •

Any electoral system would have to prioritize these guidelines for a given context, of course, but the message of the normative advice is clear: We know what a good electoral system is. Reynolds is perhaps the most explicit in this normative vein: "Just as doctors seek to diagnose and treat sick patients with a variety of drugs and behavioral modifications the constitutional engineer looks on an ailing society and attempts to predict what institutional medicines might best stem the blood flow and provide the long-term foundation for a return to health and stability."⁹ Those designing the electoral system are removed from the context. They are impartial. They observe what is not working, and they prescribe an electoral system to fix it.

There is resistance to what could be called, without too much hyperbole, proselytizing. Mark Tushnet cautions scholars from even attempting to apply their theories to practice. However relevant outside criteria are to a given context, it is possible they may be rejected or ignored for the very reason that they are external. "Normative advice giving might occasionally have some beneficial effects, but in general the advice will be dominated by politics. In our capacity as scholars, we are better off observing what happens as constitutions are designed and implemented and trying to figure out why what happens happens, rather than

⁸ Jarrett Blanc, Aanund Hylland and Kåre Vollan, State Structure and Electoral Systems in Post-Conflict Situations (Washington, D.C.: IFES,[2006]), 39-41.

⁹ Reynolds, *Designing Democracy in a Dangerous World*, 17.

offering normative advice on good constitutional design.¹⁰ This paper is not concerned with resolving the debate over the value of normative advice. Rather, it evaluates the normative advice on offer. If we accept that scholars will seek to shape policy, in other words, can we be confident in the advice they do give?

Types of electoral systems

Before addressing this claim, it is worth briefly describing the basic types of electoral systems. The literature is replete with variations on each theme presented here; the curious reader need only follow this paper's bibliography to learn further technical details. In fact, a single publication would suffice, so repetitive are the introductory chapters in the field of electoral systems. Taagepera's review divides the world of electoral systems into those with single-member districts and those with multi-member districts, and that seems as good a place as any to start.

Single-member districts (abbreviated SMD, they have a district magnitude of 1) are divisions of a country from which a single parliament member is elected. The U.S. House of Representatives fits this model. The next component is the electoral formula, and here there are but a few options. The first is a plurality formula: he candidate who gets the most votes in each district is awarded that district's seat in parliament. This is the rule called first-past-the-post, or FPTP. The second option in single-member districts is a majority formula. A simple plurality vote share will not suffice; it must be a majority. I a field of more than two candidates, this formula is often accompanied by a rule requiring a run-off between the top two vote getters, ultimately resulting in a candidate with majority support. The third and final option is the

¹⁰ Mark Tushnet, "Some Skepticism about Normative Constitutional Advice," *William and Mary Law Review* 49 (2007-2008), 1495.

alternative vote. Voters are asked to rank the candidates. If no candidate receives a majority of first-place votes, the second-, third-, and nth-place votes are redistributed until there is a winning candidate. The variety of formulas for this redistribution makes the alternative vote more a category unto itself than a single option, but each of these formulas shares with plurality and majority systems the end result: one candidate is elected per district.

With multi-member districts (a district magnitude greater than 1), there are more options. Additionally, as Dummett noted, formulas for multi-member districts have received far greater attention by scholars and practitioners.¹¹ Broadly, the two approaches are systems of proportional representation (PR), and systems that use the single transferable vote. PR systems are differentiated by how much control political parties have over determining who gets elected to parliament. On the end of the spectrum where parties have the most control is closed list PR, which Taagepera calls "the purest form of list PR."¹² Each party provides voters with a list of its candidates for that election in that district, and voters vote for parties, not individual candidates. Any seats we win in parliament, the parties say, will be given to these candidates, in the order in which they appear on our list. "This variant gives more power (at least potentially) to the parties' central leadership than any other democratic electoral system, since leaders can decide which candidates get the top positions on the list."¹³

Another option is open list PR. Just as in closed list PR, each party lists its candidates for a given district. But in open list PR, voters have the option, when they vote for a party, to also support an individual candidate (or candidates). According to Taagepera, information asymmetries between party leaders and voters make a complete reshuffling of party lists

¹¹ Michael A. E. Dummett, *Principles of Electoral Reform* (Oxford; New York: Oxford University Press, 1997), 193., 1.

 $^{^{12}}$ Taagepera and Shugart, 24.

¹³ Taagepera and Shugart, 24.

unlikely¹⁴, but it is technically possible. Furthest to the opposite end of the spectrum from closed list PR is what Taagepera calls quasi-list PR. In these systems voters vote for individual candidates; it is not optional, as it is with open list PR. "All the votes for candidates of a given party are totaled to determine how many seats are awarded to the party, as though they were votes for a list. The seats are then filled according to the relative number of votes gained by each candidate."15 Some PR systems allow political parties to strike pre-election bargains, called apparentement. "The party lists that are thus linked appear separately on the ballot, and each voter normally votes for one list only...but in the initial allocation of seats, all of the votes cast for the linked lists are counted as having been case for one list. The next step is the proportional distribution of the seats won by the apparentement to the individual parties that belong to it."¹⁶

Regardless of the type of list PR chosen, it is also necessary to choose a formula to distribute seats to parties. Consider a 10-member parliament. If Party A receives 40 percent of the vote, Party B receives 30 percent, Party C receives 20 percent, and Party D 10 percent, then A will get 4 seats, B will get 3, and so on. But say parliament has room for just 9 members, or say Parties C and D each get 15 percent. Fractions of candidates cannot hold office. The two basic approaches are subtraction of votes already used to assign seats¹⁷ and division of vote shares by a predetermined constant. Again, the level of technical detail is astounding. Suffice it to say that each approach leads to either rounding up or rounding down of vote shares. According to Taagepera, among the three most common division rules, "d'Hondt is relatively favorable to large parties (or alliances, where the law permits them), unmodified Sainte-Laguë to

¹⁴ Taagepera and Shugart, 24-25.
¹⁵ Taagepera and Shugart, 25.

¹⁶ Arend Liphart, Electoral Systems and Party Systems : A Study of Twenty- Seven Democracies, 1945-1990 (Oxford; New York: Oxford University Press, 1994), 134. ¹⁷ Taagepera and Shugart, 30

small parties, and modified Sainte-Laguë to middle-sized parties. The larger the M, however, the less difference the allocation rule makes, as each of these will approach pure PR."¹⁸

In addition to PR systems, seats from multi-member districts can be assigned through single transferable vote (STV) systems. These are similar to the alternative vote systems in single-member districts, in which voters rank the candidates. "Once the ordinal ballots are cast, a quota must be calculated to determine how many votes are needed to elect any one candidate...at this point, two forms of vote transfer take place. The excess votes — those above the quota — of the just-elected candidates are transferred to the second-choice candidates marked on the ballots. Simultaneously, the lowest-ranking candidate is declared out of the running and votes for this candidate are similarly transferred. These transfers may help some other candidates to reach the quota. The process continues until all seats are filled through attainment of the quota."¹⁹ Taagepera writes that this system "gives maximum freedom to voters and minimum control to party leaders"²⁰, but of course it is still the parties that provide the lists of candidates. Two related approaches are the single nontransferable vote (voters vote for individual candidates, and FPTP is used) and the limited vote (like STV, but voters rank fewer candidates than there are open seats).

Finally there are mixed systems, systems that combine two or more of the approaches discussed above. Louis Massicotte and André Blais write that "mixed systems must incorporate two opposed principles.²¹ A parliament that elects some seats by plurality and some by majority, then, would not count as a mixed system. Massicotte and Blais divide mixed systems

¹⁸ Taagepera and Shugart, 33.¹⁹ Taagepera and Shugart, 26-27.

²⁰ Taagepera and Shugart, 27.

²¹ Louis Massicotte and André Blais, "Mixed Electoral Systems: A Conceptual and Empirical Survey," *Electoral* Studies 18, no. 3 (9, 1999), 345.

into those they call independent and those they call dependent.²² The three types of independent systems are coexistence (some districts use a PR system, others use a non-PR system), superposition (all districts use both systems simultaneously, so each voter has multiple representatives in parliament), and fusion (in a given multi-member district, some of the seats are assigned by each system). The two types of dependent systems are conditional (one system applies first, and then another system applies if necessary) and unconditional (both systems apply, but how the second applies depends on the outcome of the first). What Massicotte and Blais call conditional dependent systems, Taagepera calls personalized PR: "The voter is given two votes, one for an individual candidate and one for a party list. The candidate vote is for a single-member district contest which is won by plurality. The second vote, for a party list, is used to provide compensatory seats to those parties which have not received in the singlemember districts the seat share proportional to their nationwide vote share."²³ There are likely more combinations of district magnitudes and electoral formulas than could ever be implemented. This discussion was intended only to familiarize the reader with the basic components and relationships.

Supplements to, and ways to circumvent, electoral systems

Electoral systems cannot, and do not attempt to, control all facets of democracy, or even of voter preferences. There remain gaps that are ignored, filled, or exploited. Michael Dummett writes that though scholars of electoral systems typically focus only on electoral systems at the aggregate level, what really matters to people is not how their votes are tallied but who is

²² Massicotte and Blais, 347.

²³ Taagepera and Shugart, 35.

ultimately elected.²⁴ Dummett is concerned that in their haste to study something tractable, scholars miss what is most meaningful. David Farrell has a similar concern: "It is less important that the parliament is statistically representative of voters, and more important that it acts properly in the interests of the citizens; composition is less important than decisions."²⁵ No electoral system can guarantee this outcome.

It is also possible that other components of the structure of government can dilute the effects of electoral systems, or make measuring those effects more difficult. These include any measure intended to take power away from parliament, either directly or by granting power to other branches of government. Ben Reilly and Andrew Reynolds list a directly elected president, a bicameral parliament, federalism or other devolutions of power away from the federal government, and a strong executive as examples.²⁶ Electoral systems do not specify the powers of the legislative bodies they produce; that task is usually left to constitutions.

Then there are approaches political actors can take to supplement or circumvent the explicit or implicit goals of electoral systems. Farrell calls these "artificial' measures."²⁷ Two approaches related to districts are malapportionment and gerrymandering. The former refers to manipulating how many people live in each district so as to maximize the number of representatives from a certain political party as a reward for its strength in a certain district.²⁸ The latter refers to manipulating what type of people live in each district, so as to ensure support for a certain party is concentrated rather than dissipated.²⁹ Three approaches related to parties are

²⁴ Dummett, 3.

²⁵ David M. Farrell, *Electoral Systems : A Comparative Introduction*, 2nd ed. (Houndmills, Basingstoke, Hampshire, UK; New York: Palgrave Macmillan, 2011), 11.

²⁶ Ben Reilly and Andrew Reynolds, "Electoral Systems and Conflict in Divided Societies," in *International Conflict Resolution After the Cold War*, ed. Paul C. Stern (Washington, D.C.: National Academy Press, c2000, 2000), 437.

²⁷ Farrell, 12.

²⁸ Ibid., 13.

²⁹ Ibid., 14.

thresholds, party laws, and quotas. Minimum electoral thresholds keep minor parties out of parliament by requiring a specific vote share to win a seat.³⁰ Party laws prevent specific parties, types of parties, or parties with specific goals from fielding candidates or holding office.³¹ Quotas come in two forms: they can either require parties to nominate a certain percentage of their candidates from historically marginalized groups such as certain ethnicities, certain regions, or women; or they can require parties to fill a certain percentage of the seats they win with people from these groups. Reynolds reviews the history of quotas, including their use by apartheid South Africa, and finds, "the aura around reserved communal seats and special mechanisms has swung to a point where it is seen as more progressive to reserve seats or ensure by some method that minorities are descriptively represented in legislatures. The aura of paternalism and tokenism, however, continues to taint such affirmative action mechanisms."³² Each of these approaches intervenes in the expression of voters' preferences, and each can be used for purposes in harmony or conflict with those of the formal electoral system.

Effects of electoral systems

The preponderance of the literature on electoral systems in devoted to predicting their effects. Scholars' focus of debate is the difference in predicted outcomes of plurality or majority systems and systems of proportional representation. The common method is to describe the effects of PR systems that set those systems apart from plurality or majority systems. Neither type's effects are usually described in isolation from the other type's effects. Reilly and Reynolds offer eight effects PR may have:

³⁰ Ibid., 17.

³¹ Ibid.

³² Andrew Reynolds, *Electoral Systems and the Protection and Participation of Minorities* (London: Minority Rights Group International, 2006), 15.

PR systems in general are praised because of the way in which they: (1) faithfully translate votes cast into seats won, and thus avoid some of the more destabilizing and "unfair" results thrown up by plurality-majority electoral systems; (2) give rise to very few wasted votes; (3) facilitate minority parties' access to representation; (4) encourage parties to present inclusive and socially diverse lists of candidates; (5) make it more likely that the representatives of minority cultures/groups are elected; (6) make it more likely that women .are elected; (7) restrict the growth of "regional fiefdoms"; and (8) make power sharing between parties and interest groups more visible.³³

This section considers these effects and others. The occasional scholar refers to normative differences between electoral systems - Josep Maria Colomer writes that PR systems produce "high social utility"³⁴ — but those are not discussed here.

Really no review of the theorized effects of electoral systems can begin (and few do) without reference to Maurice Duverger. Duverger divided effects into two categories: mechanical and psychological.³⁵ Kenneth Benoit describes the difference: "The mechanical effect of electoral systems describes how the electoral rules constrain the manner in which votes are converted into seats, while the psychological factor deals with the shaping of voter (and party) responses in anticipation of the electoral law's mechanical constraints."³⁶ It can be difficult to disentangle these categories, but since this division permeates the literature, it is followed here, as well.

Mechanical effects

The mechanical effect that has garnered the most scholarly attention is the relationship between the type of electoral system and the number of political parties that win seats in parliament. And each scholar's work inevitably begins with Duverger's Law: "The simple-

³³ Reilly and Reynolds, "Electoral Systems and Conflict in Divided Societies," 448.

³⁴ Josep Maria Colomer, *Political Institutions : Democracy and Social Choice* (Oxford England; New York: Oxford University Press, 2001), 208.

³⁵ Arend Liphart, Electoral Systems and Party Systems :A Study of Twenty- Seven Democracies, 1945-1990 (Oxford; New York: Oxford University Press, 1994), 224. ³⁶ Kenneth Benoit, "Duverger's Law and the Study of Electoral Systems," *French Politics* 4, no. 1 (2006), 72.

majority single-ballot system favours the two-party system.³⁷⁷ (Others formulated the concept before Duverger did, but the name stuck.³⁸) As Benoit writes, "Among students of electoral systems, there is no better-known, more investigated, nor widely cited proposition than the relationship between plurality electoral laws and two-party systems known as Duverger's Law.³⁹ Duverger also hypothesized a relationship between PR and a system with more than two parties, but he was less confident in that relationship and thought its effects limited to the first election under the PR system.⁴⁰

Scholars since Duverger have attempted to elaborate upon and test Duverger's Law. Arend Lijphart tests first tests the correlation between the type of electoral system and what he calls the effective threshold — not a formal threshold but the threshold imposed by the electoral formula. He finds that majoritarian are indeed correlated with fewer political parties than are PR systems.⁴¹ He then tests the effect of the various PR electoral formulas and finds no difference between them.⁴² To these findings Misa Nishikawa adds the effects of mixed systems. Nishikawa concludes that mixed systems are correlated with fewer parties than fully proportional systems, but that dependent mixed systems have more parties than independent systems.⁴³ Similarly, Robert Moser and Ethan Scheiner find that in mixed systems, those seats elected by PR systems are filled by more political parties than those seats elected by majoritarian systems.⁴⁴

³⁷ Maurice Duverger, *Political Parties, their Organization and Activity in the Modern State* [Partis politiques.English], 2d ed. (London: Methuen, 1962), 217.

³⁸ Benoit, "Duverger's Law and the Study of Electoral Systems," 71.

³⁹ Ibid., 69.

⁴⁰ Duverger, 252.

⁴¹ Lijphart, 50.

⁴² Lijphart, 51.

⁴³ Misa Nishikawa and Erik S. Herron, "Mixed Electoral Rules' Impact on Party Systems," *Electoral Studies* 23, no. 4 (12, 2004), 766.

⁴⁴ Robert G. Moser and Ethan Scheiner, "Mixed Electoral Systems and Electoral System Effects: Controlled Comparison and Cross-National Analysis," *Electoral Studies* 23, no. 4 (12, 2004), 586.

The other mechanical effect is the relationship between electoral system type and proportionality, or how closely the allotment of seats approximates the share of votes. Rae writes of proportionality as a normative goal. "The principle of proportional representation is quite simple: the share of seats awarded to any party should be equal to the share of the vote which it has won."⁴⁵ In the literature, district magnitude stands out as the consensus component that is most closely linked with proportionality. Taagepera calls this component "a most important feature"⁴⁶ and writes that as district magnitude increases, the degree of proportionality increases, as well. Rae comes to the same conclusion, regardless of the electoral formula used.⁴⁷ Rae also writes that there are decreasing marginal effects from increasing the district magnitude: "Even without being able to specify that transition point, it is possible to confirm the hypothesized curvilinear relationship: the proportionality of outcomes increases at a decreasing rate when district magnitudes are increased. "48 Liphart finds that PR systems in general produce more proportional outcomes than do majoritarian systems⁴⁹, and that the larger the assembly size, the closer any system will likely come to a proportional outcome (there will be less rounding required).⁵⁰ Moser and Scheiner find the degree of proportionality higher in dependent mixed systems than in independent mixed systems.⁵¹

Psychological effects

Psychological effects refer to changes in perceptions or incentives by parties, politicians, or voters induced by electoral systems. For parties, the effect can either be an incentive to merge (or the protection of big parties) or an incentive to split (or the facilitation of small parties).

⁴⁵ Rae. 28.

 ⁴⁶ Taagepera and Shugart, 19.
 ⁴⁷ Rae, 114.

⁴⁸ Rae, 118.

⁴⁹ Lijphart, 85.

⁵⁰ Liphart, 12.

⁵¹ Moser and Scheiner, 587.

Liphart finds that the difference in proportionality between types of PR formulas is unlikely to change incentives: "These differences are clearly not large enough to produce commensurate differences in the strategic calculations by élites and voters and hence insufficient psychological forces systematically to affect the party system."⁵² Moser and Scheiner test the differences in the number of parties between the tiers in mixed systems. They find that in independent mixed systems, in mixed systems that fill most seats by non-PR methods, and in mixed systems where the non-PR tier uses a plurality formula, fewer parties are likely to field candidates.⁵³ They also find that this effect gains strength the longer the mixed system is in place.⁵⁴ With dependent mixed systems, there is less if a psychological effect to consolidate parties. "This influence of the PR tier is felt at the national level (as well as the district level) because the minor parties promoted by PR are likely often to have regionally concentrated followings. This means that not only are there more parties contesting SMD elections than there would be in a pure SMD system; but also that these parties differ from district to district, further promoting party fragmentation at the national level."⁵⁵ Liphart finds that *apparentement*, which allows smaller parties to bandwagon with larger parties, has the same diluting effect on the incentive to reduce the number of parties.⁵⁶

Both Liphart and Kostadinova study which component of electoral systems is responsible for producing the effect on the number of parties that persist in fielding candidates. Liphart finds the most important factor is the effective threshold.⁵⁷ When small parties see that, year after year, their support is insufficient to win even a single seat, they act to merge with

⁵² Lijphart, 90.
⁵³ Moser and Scheiner, 590.
⁵⁴ Moser and Scheiner, 593.

⁵⁵ Moser and Scheiner, 594.

⁵⁶ Lijphart, 134-135.

⁵⁷ Lijphart, 85, 88.

larger parties or simply dissolve. Kostadinova finds that formal thresholds, too, have this psychological effect.⁵⁸ Small parties systematically kept out of parliament by the ruling parties' manipulation of the threshold take the hint and adapt.

Even if the number of parties does not change, Charles Boix writes, each political party might have an incentive to nominate fewer candidates under certain electoral systems. (Electoral systems' effect on parties' incentives to nominate women, in particular, is considered in the next chapter.) Boix identifies two causes, one direct and the other indirect. First, voters are likely to act strategically, and they will not vote for candidates they do not expect to win. Second, parties will anticipate this behavior and not nominate or support candidates who cannot win. Boix writes that both these effects are likely to be weaker under PR systems. "Strategic voting declines, however, as the proportionality of the electoral system increases. Because seats can be gained with only a fraction of the total vote, voters have fewer incentives to abandon their most preferred candidates."⁵⁹ Different electoral systems may have different advantages for incumbent candidates, as well. Kenichi Ariga finds that in systems with greater district magnitudes, the incumbency rate is lower.⁶⁰ Ariga assumes a system that gives voters some say in the composition of party lists. With a greater number of seats per district, voters will feel less pressured to settle and just choose between two parties, and they will be in a better position to demand a degree of intra-party competition.

Different types of electoral systems are also thought to have different effects on two types of stability. Taagepera writes about the stability of the government, in the parliamentary sense of the word. "To promote stability, election outcomes should be sufficiently decisive to enable the

⁵⁸ Kostadinova, 31.

⁵⁹ Carles Boix, "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies," *The American Political Science Review* 93, no. 3 (Sep., 1999), 610.

⁶⁰ Kenichi Ariga, "Entrenched Incumbents, Irresponsible Parties? Comparative Analysis of Incumbency Advantage Across Different Electoral Systems"), 134.

polity to address the issues it faces, yet not so overdecisive that the losers feel permanently excluded to the point where they might resort to violence.¹⁶¹ According to Taagepera, plurality systems do this better than do PR systems, but there is a risk that plurality systems provide parties in the minority no hope of ever achieving greater power. Reynolds writes about another type of stability: the stability of the democratic order. This type of stability, according to Reynolds, is best achieved by PR systems. "The foundations of democratic stability rest on inclusion."⁶² Reynolds acknowledges that inclusion risks the first type of stability yet concludes, "There has not been a case of successful democratization in a divided society which did not, at its core, value the principle of inclusion in some important way."⁶³

In addition to psychological effects on how many parties and candidates are, and how stable the system is, scholars focus heavily on the types of party behavior induced by different electoral systems. Dummett writes that the fewer the parties, the more moderately they will behave.⁶⁴ Reynolds expands on this argument: "At its core, *integrative power sharing* (also known as *centripetalism*) revolves around the belief that elites need to be given incentives to appeal outside of their primary and narrowly defined ethnic constituencies. The system should create the dynamic that the electoral advantage lies with the moderate multiethnic politician."⁶⁵ Non-PR systems, especially systems that use the alternative vote or the single transferable vote, are thought to provide this incentive best. To gain voters' second- and third-choice votes, each party will moderate its messages and field broadly appealing candidates, so as not to limit the party's overall vote share to only the first-choice votes it receives from its most ardent

⁶¹ Taagepera and Shugart, 62-63.

⁶² Reynolds, *Designing Democracy in a Dangerous World*, 11.

⁶³ Ibid. , 11.

⁶⁴ Dummett, 159.

⁶⁵ Reynolds, *Designing Democracy in a Dangerous World*, 20.

supporters. Tatiana Kostadinova finds that mixed systems have a similar, though more nuanced, effect on political parties' behavior:

On the one hand, they have to distinguish themselves from rivals in order to be easily identified by voters and receive the votes of all their supporters fairly translated into seats under the PR provisions. On the other hand, for the competition in SMD, only parties which are able to get a majority of the vote win seats. Therefore, for this part of the election, they need to enter into coalitions with others who stand close to their program. If a party-participant in the election exclusively focuses on its own platform, it will attack the other participants in a struggle for a particular sector of the electorate. As a result, it will alienate itself from possible coalition partners for the SMD competition. Thus, serious contenders for power under mixed systems will try to avoid extreme strategies; those would only hurt them bringing success only in one part of the contest.⁶⁶

A reason for much of the recent interest in electoral systems is their hypothesized effect on resolving civil conflict — between ethnic groups, regional groups, or groups divided by some other historical grievance. The debate between those who support Lijphart's concept of *consociationalism*, which contrasts with the *centripitalism* described above, is the focus of the literature. Consociationalism is a comprehensive idea for inclusion at all levels of government; the electoral system, usually PR, is but one component. Reynolds describes how inclusion reduces conflict: "It has most value as a confidence-building mechanism which allows both political elites and cultural/ethnic communities to feel that they have an influence on the decisions of the state; and that their representatives will be able to ensure that their rights are protected...Inclusive structures not only build confidence in divided societies, but they facilitate a better distribution of resources from the centre to the country as a whole."⁶⁷ According to the consociationalism argument, only once rival groups feel secure and confident that they will not be excluded entirely from the benefits of society will they be willing to bargain over the division of the benefits.

⁶⁶ Tatiana Kostadinova, "Do Mixed Electoral Systems Matter?: A Cross-National Analysis of their Effects in Eastern Europe," *Electoral Studies* 21, no. 1 (3, 2002), 25.

⁶⁷ Andrew Reynolds, *Electoral Systems and Democratization in Southern Africa* (Oxford; New York: Oxford University Press, 1999), 60.

The most prominent argument against consociationalism is that it reinforces the divisions present in society.⁶⁸ If the only way for voters' voices to be heard is to support a parochial political party, then they will do just that indefinitely. Beyond this concern, Reilly and Reynolds write that the initial consociational bargain may overlook or fail to predict other, more meaningful societal divisions.⁶⁹ A country could be stuck with the worst of both worlds: ongoing conflict over one set of identities and an ossified electoral system that addresses another set of identities. Donald Horowitz, clearly in the centripitalist camp, questions the very logic of consociationalism: "Why should majority-group leaders, with 60 per cent support, and the ability to gain all of political power in a majoritarian democracy, be so self-abnegating as to give some of it away to minority-group leaders?... When leaders compromise across ethnic lines in the face of severe divisions, there is usually a high price to pay. Counter-elites arise who make an issue of the compromise, referring to it as a sell-out.⁷⁰ Horowitz further writes that consociational arrangements are more likely to succeed the resolution of conflict than to precede it.⁷¹

Reilly and Reynolds raise a similar issue: consociationalism assumes that voters are too hardened and fearful to reach across the conflict line, but that their representatives are somehow more conciliatory.⁷² Whether consociational arrangements reduce conflict depends in large part on how those arrangements are received by minority groups. Pippa Norris finds no support for the hypothesized correlation between PR systems and support for the political system by ethnic

⁶⁸ Reynolds, *Designing Democracy in a Dangerous World*, 20.

⁶⁹ Reilly and Reynolds, "Electoral Systems and Conflict in Divided Societies," 431.

⁷⁰ Donald L. Horowitz, "Constitutional Design: Proposals Versus Processes," in *The Architecture of Democracy: Constitutional Design, Conflict Management, and Democracy*, ed. Andrew Reynolds (Oxford, UK; New York: Oxford University Press, 2002), 20-23.

⁷¹ Horowitz, 20-23.

⁷² Reilly and Reynolds, "Electoral Systems and Conflict in Divided Societies," 449.

minority populations.⁷³ If these groups do not believe the system produces meaningful inclusion, they are unlikely to tolerate compromises by their representatives.

Discussion of centripitalism's supposed moderating effect is equally contentious. (The debate between the two camps has changed little over nearly three decades, but it is cordial enough that Reynolds's book contains a photograph of nearly every scholar cited in this paper, as well as every other significant writer in the field.) Reilly writes that whereas consociationalism assumes a divided electorate and a leadership concerned with mutual gains, centripitalism assumes the opposite — that voters from one group would support a candidate from another group, however moderate the candidate's positions. Centripitalism, Reilly writes, "posits the electorate as the engine of moderation,"⁷⁴ but it "cannot invent moderation where none exists."⁷⁵ Reilly and Reynolds similarly conclude that even if consociationalism entrenches divisions, it should be used as a desperation measure when divisions are "primordial." "If ethnic identities and voting behaviors are fixed, then there is no space for institutional incentives aimed at promoting accommodatory strategies to work."⁷⁶ Writing about ethnic conflict, specifically, Reynolds adds further conditions. Whether consociationalism or centripitalism is more favorable toward minority ethnic groups depends on 1) whether minority groups tend to vote for a "minority platform" or for a range of distinct parties; 2) whether or not minority groups are geographically concentrated; and 3) whether or not minority groups are numerically significant

⁷³ Pippa Norris, "Ballots Not Bullets: Testing Consociational Theories of Ethnic Conflict, Electoral Systems, and Democratization," in *The Architecture of Democracy :Constitutional Design, Conflict Management, and Democracy*, ed. Andrew Reynolds (Oxford, UK; New York: Oxford University Press, 2002), 233.

⁷⁴ Ben Reilly, *Democracy in Divided Societies: Electoral Engineering for Conflict Management* (Cambridge: Cambridge University Press, 2001), 176.

⁷⁵ Ben Reilly, "Electoral Systems for Divided Societies," Journal of Democracy 13, no. 2 (2002), 167.

⁷⁶ Reilly and Reynolds, "Electoral Systems and Conflict in Divided Societies," 430.

in determining the outcome of elections.⁷⁷ Sujit Choudhry reduces the debate to "fundamentally different assumptions over the durability of politically mobilized ethnocultural identities."⁷⁸

Matthijs Bogaards takes a normative approach, writing that the choice of electoral system is a matter of the electoral system designers' goals:

Should the party system block the politicization of ethnicity by restricting political competition to ideological and socio-economic issues? Should it aggregate socio-cultural divisions into broad-based multi-ethnic or explicitly non-ethnic parties? Or should it rather translate social cleavages into political fault-lines through particularistic parties?⁷⁹

In other words, each electoral system will have certain effects, and the institutional engineer must only choose the desired outcome. Reynolds complicates the issue further by providing normative goals for electoral systems in divided societies: representativeness, accessibility, providing incentives for conciliatory beahviour, accountability, encouraging cross-cutting parties, and stability of government.⁸⁰ This list hardly seems controversial, but no scholar claims that a single approach can address all of these criteria. So scholars agree that electoral systems affect conflict, but there is no consensus on how.

Some scholars have explored the connection between electoral systems and corruption, though there is no consensus here either. Roger Myerson writes that corruption is likely to be lowest under PR systems. In majoritarian systems, voters are forced to vote for one of probably two parties, even if they are both corrupt. In PR systems, though, votes for minor parties are not wasted, so voters can express their support for non-corrupt parties, incentivizing the larger

⁷⁷ Reynolds, *Electoral Systems and the Protection and Participation of Minorities*, 26.

 ⁷⁸ Sujit Choudhry, "Bridging Comparative Politics and Comparative Constitutional Law: Constitutional Design in Divided Societies," in *Constitutional Design for Divided Societies: Integration Or Accommodation?*, ed. Sujit Choudhry (New York: Oxford University Press, 2008), 27.
 ⁷⁹ Matthijs Bogaards, "Comparative Strategies of Political Party Regulation," in *Political Parties in Conflict-Prone*

¹⁹ Matthijs Bogaards, "Comparative Strategies of Political Party Regulation," in *Political Parties in Conflict-Prone Societies : Regulation, Engineering and Democratic Development*, eds. Ben Reilly and Per Nordlund (Tokyo; New York: United Nations University Press, 2008), 51.

⁸⁰ Reynolds, *Electoral Systems and Democratization in Southern Africa*, 92.

parties to reduce their own levels of corruption.⁸¹ Conversely, Eric Chang finds that open-list PR systems in particular promote corruption. In situations of high electoral uncertainty, where candidates are required to seek individual votes, candidates have an incentive to secure their rank on the party list through corruption.⁸² Torsten Persson presents yet another argument: electoral systems that include individual votes, such as plurality systems, have less corruption because candidates are concerned about the negative effects corruption may have on their careers.⁸³ This effect is difficult to reconcile with Persson's other argument, that in small electoral districts leaders are able to keep out challengers and shield their corrupt practices from competition.⁸⁴ According to Persson, plurality systems discourage corruption and small, single-member districts promote corruption. But these two components are often part of a single electoral system. Perhaps it is easiest to conclude as Myerson does: "More generally, the electoral system is only one of many structural factors that can affect the level of political corruption in a country."⁸⁵

This section ends by discussing the effects of electoral systems on voters' connection to their governments. According to Reilly and Reynolds, non-PR systems provide a direct connection between voters and their representatives. PR systems, in which voters generally vote for political parties, have less "geographic accountability."⁸⁶ Representatives have no clearly defined constituencies, or they share a constituency with other representatives, perhaps of other political parties. Scott Ashworth and Ethan Bueno de Mesquita write that the multi-member

⁸¹ Roger B. Myerson, "Effectiveness of Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis," *Games and Economic Behavior* 5, no. 1 (1, 1993), 130-131.

⁸² Eric C. C. Chang, "Electoral Incentives for Political Corruption Under Open-List Proportional Representation," *The Journal of Politics* 67, no. 3 (Aug., 2005), 727.

⁸³ Torsten Persson, Guido Tabellini and Francesco Trebbi, "Electoral Rules and Corruption," *Journal of the European Economic Association* 1, no. 4 (Jun., 2003), 983.

⁸⁴ Ibid.

⁸⁵ Myerson, 131.

⁸⁶ Reilly and Reynolds, "Electoral Systems and Conflict in Divided Societies," 449.

districts that accompany PR systems change representatives' priorities to the central government and the party, leaving voters' desires for services at the local level unfulfilled.⁸⁷

Timothy Meisburger further questions the connection between citizens and their government under PR systems: "High-level power-sharing between the elites at the top of warring factions has seldom resulted in an improvement in democracy for the average person, who often ends up trading one set of authoritarian leaders for another."⁸⁸ Services for constituents are likely to be poor under PR systems unless party systems are well developed. For Reynolds, this reasoning implies that autocrats can delay sharing power with rival groups just because they were able to effectively suppress political party development. Reynolds writes that Meisburger "echoes the arguments of autocrats (Yoweri Museveni of Uganda and King Abdullah of Jordan, to name two)."89

Scholars also question whether representation under PR systems necessarily translates into true representation of voters' preferences. Richard Katz writes that in fact voters have very little choice: the rules of the electoral system and the potential candidates are chosen by the political parties.⁹⁰ This lack of choice, and the divergence of interests between voters and their representatives, may make voters "disillusioned with democracy."⁹¹ On the other hand, Sarah Birch argues that non-PR systems undermine the entrenchment of democracy. She writes that single-member districts rarely allow for a party in the minority to become the majority party. "The largest party will be in a position to dominate decision-making in most areas and may well

⁸⁷ Scott Ashworth and Ethan Bueno de Mesquita, "Delivering the Goods: Legislative Particularism in Different Electoral and Institutional Settings," The Journal of Politics 68, no. 1 (Feb., 2006), 177.

 ⁸⁸ Timothy M. Meisburger, "Getting Majoritarianism Right," *Journal of Democracy* 23, no. 1 (2012), 161.
 ⁸⁹ Andrew Reynolds and John M. Carey, "Getting Elections Wrong," *Journal of Democracy* 23, no. 1 (2012), 165.

⁹⁰ Richard S. Katz, "Electoral Reform and its Discontents," British Elections & Parties Review 9, no. 1 (01/01; 2012/04, 1999), 4. ⁹¹ Meisburger, 157.

be able to use its power to shape institutions in such a way as to entrench it permanently in the political life of the country in question."⁹²

Trust in the political system may be undermined by other features of the electoral system, as well. According to Stacy Gordon, the more complicated the electoral system is, the more difficult it is for voters to make the connection between their vote and the number of seats won by their party, the less likely they are to be interested in politics⁹³ and develop political knowledge.⁹⁴ Farrell writes that this problem is more likely to occur under PR systems: "After all, it is far easier to understand how a politician has been elected because they had more votes than anyone else than it is to make sense of how modified Sainte-Laguë produced a certain number of seats for your preferred party."⁹⁵ PR systems also produce coalition governments in "secret meetings between party elders," and these coalitions often remain in place regardless of the results of intervening elections.⁹⁶ Marien Sofie finds that "political trust is highest within countries that have very proportional or very disproportional election outcomes."⁹⁷ It is not clear how this could be called an independent effect of the electoral system alone, nor how this finding would apply to policy.

Causes of electoral system change

Most often proceeding alongside, and occasionally intersecting, the literature on the effects of electoral systems have been studies of the causes of electoral systems. As will be

⁹² Sarah Birch, "Single-Member District Electoral Systems and Democratic Transition," *Electoral Studies* 24, no. 2 (6, 2005), 289-290.

⁹³ Stacy B. Gordon and Gary M. Segura, "Cross-National Variation in the Political Sophistication of Individuals: Capability Or Choice?" *The Journal of Politics* 59, no. 1 (Feb., 1997), pp. 137.

⁹⁴ Gordon and Segura, 144.

⁹⁵ Farrell, 201.

⁹⁶ Ibid., 196-197.

⁹⁷ Marien Sofie, "The Effect of Electoral Outcomes on Political Trust: A multi–level Analysis of 23 Countries," *Electoral Studies* 30, no. 4 (2011), 11.

discussed in the next section, scholars rarely make the relationship between supposed effects and supposed causes explicit. In their comprehensive handbook on electoral systems for the International Institute for Democracy and Electoral Assistance, Andrew Reynolds, Ben Reilly, and Andrew Ellis write, "The process through which an electoral system is designed or altered has a great effect on the type of the system which results, its appropriateness for the political situation, and the degree of legitimacy and popular support it will ultimately enjoy"⁹⁸ The handbook lists six ways electoral systems come into being:

First, they can be inhereited without significant alteration from colonial or occupying administrations...Second, they can result from peace process negotiations between communal groups seeking to bring an end to division or war...Third, the system may be effectively imposed by the groups responsible for post-conflict political reconstruction...Fourth, elements of a previous authoritarian regime may have a strong role in designing a new electoral system during the period when they are being divested of power...Fifth, an expert commission may be set up to investigate the electoral system alone...or as part of the broader constitutional context...Sixth, citizens may be involved more widely in the design process by the establishment of a non-expert citizens' assembly on the electoral system.

But this is more a list of opportunities for electoral system change than it is a list of causes of change; it does not specify how or why change happens in any of these situations. That is the goal of this section.

Rational choice

The cause of electoral system change most often discussed in the literature is rational

choice. Actors or parties make cost-benefit calculations, weighing the effects of different

electoral systems, and deciding upon, or bargaining for, a system that suits their interests.

One such interest is the interest larger parties have in excluding smaller parties from

government. According to Stein Rokkan, it was this goal that drove the development of new PR

 ⁹⁸ Andrew Reynolds, Ben Reilly and Andrew Ellis, *Electoral System Design: The New International IDEA Handbook* (Stockholm, Sweden: International Institute for Democracy and Electoral Assistance,[2005]), 15-16.
 ⁹⁹ Ibid., 15-16.

electoral formulas in Scandinavian countries in the 1950s.¹⁰⁰ More generally, parties in power are unlikely to support changes to the system that would see them lose power. Birch writes, "In voting electoral systems into law, parliamentarians determine the mechanism through which they as individuals may or may not be chosen at the next election. It should not surprise us if they tend to be biased in favour of the systems that elected them."¹⁰¹ This interest in solidifying the existing power dynamic applies in times of democratic transition, as well. In post-communist countries, electoral systems were determined through bargaining among elites.¹⁰² And in postconflict contexts, former combatants may way the electoral system to ratify their newfound political power.¹⁰³

Benoit divides rational choice theories into three types of self interests. According to policy-seeking theories, political parties support electoral systems that they expect will produce the necessary legislative power to enact certain policies.¹⁰⁴ In office-seeking theories, political parties are concerned with maximizing the share of state resources they can capture as a result of their electoral success.¹⁰⁵ Personal gain theories focus on the interests of key individual politicians in driving party preferences.¹⁰⁶ Birch extends this third theory to apply to politicians in general. "It is probably safe to assume that most politicians involved in deliberations over electoral laws view their personal interests in terms of the likelihood that they will win parliamentary seats."¹⁰⁷ Shaun Bowler, David J. Lanoue, and Paul Savoie find that personal

¹⁰⁰ Stein Rokkan, *Citizens, Elections, Parties;Approaches to the Comparative Study of the Processes of Development* (New York: McKay, 1970), 161.

¹⁰¹ Sarah Birch, *Embodying Democracy :Electoral System Design in Post- Communist Europe* (New York: Palgrave Macmillan, 2002), 2.

¹⁰² Ibid., 15.

¹⁰³ Jennifer Widner, "Constitution Writing in Post-Conflict Settings: An Overview," *William and Mary Law Review* 49 (2007-2008), 1533.

¹⁰⁴ Benoit, "A Theory of Electoral Systems," 5.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid., 5-6.

¹⁰⁷ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 18.

electoral self interest is more closely correlated with politicians' support for electoral system change than is any other factor discussed in this section. "Candidates who win, from government and opposition parties, appear more similar in their views about change than candidates who lose."¹⁰⁸ Boix writes that this incentive accounts for the stability of electoral systems.¹⁰⁹ Krister Lundell agrees that rational choice explains much of the historical stability — in 1989 Taagepera wrote there was "considerable inertia"¹¹⁰ — but it does not explain the increase in electoral system changes seen in the last two decades¹¹¹ (the changes are addressed in Chapter 3). Gideon Rahat echoes this limitation of rational choice theories.¹¹²

If politicians and parties think they can predict the effects of electoral systems accurately, something Shaheen Mozaffar writes is possible¹¹³, which types of systems will they prefer under which circumstances? According to Krister, party preferences depend on expectations of future electoral performance under the existing rules. "Members of small parties, declining parties and parties with an uncertain future most likely prefer proportional representation. Large parties and established parties with a firm voter support, on the other hand, benefit from a majoritarian system that over-represents the largest parties."¹¹⁴ Birch similarly predicts, "Large parties will favour high effective electoral thresholds (whether achieve though [sic] manipulation of district format, seat allocation formulae or formal thresholds). Likewise, parties whose support is based on personal or clientelist ties will tend to prefer electoral systems that favour the cultivation of

¹⁰⁸ Shaun Bowler, Todd Donovan and Jeffrey A. Karp, "Why Politicians Like Electoral Institutions: Self-Interest, Values, Or Ideology?" *The Journal of Politics* 68, no. 2 (May, 2006), 443-444.

¹⁰⁹ Boix, 611.

¹¹⁰ Taagepera and Shugart, 4-5.

¹¹¹ Krister Lundell, *The Origin of Electoral Systems in the Post-War Era : A Worldwide Approach*, Vol. 27 (London; New York: Routledge, 2010), 110.

¹¹² Gideon Rahat, "The Politics of Electoral Reform: The State of Research," *Journal of Elections, Public Opinion & Parties* 21, no. 4 (11/01; 2012/04, 2011), 534.

¹¹³ Shaheen Mozaffar, "Electoral Systems and Conflict Management in Africa: A Twenty-Eight-State Comparison," in *Elections and Conflict Management in Africa*, eds. Timothy D. Sisk and Andrew Reynolds (Washington, DC: United States Institute of Peace Press, 1998), 84.

¹¹⁴ Lundell, 45.

personal votes, such as those with small district size and/or voter influence over the order of candidates over party lists."¹¹⁵ However, even large, secure parties may not find it in their self interest to install electoral systems that shut out smaller, weaker parties. David Brady and Jongryn Mo write that larger parties need smaller parties to accept the fairness of the electoral system¹¹⁶ so as not to encourage smaller parties to pursue power outside of the political system.¹¹⁷

Challenges to rational choice

Scholars in the rational choice vein acknowledge that the theory does not explain all electoral system changes. Yet some scholars question the underlying logic of rational choice in any instance. Katz critiques what he sees as six faulty assumptions: that seemingly strong parties necessarily expect future success; that only the majority party has a say over whether or not the electoral system is changed; that members of the majority party share homogenous interests; that individuals can truly know their own interests and make cost-benefit calculations; that parties prioritize short-term gains over long-term stability of the system; and that parties will expend scarce resources and political will on this issue over others.¹¹⁸ Brady and Mo add another assumption: that voters respond predictably to the different types of electoral systems¹¹⁹ — that is, that electoral systems really do produce the effects described in the previous section.

One of these challenges to rational choice is worthy of special attention: uncertainty. Parties may not be able to accurately assess their future electoral prospects under the current or alternative electoral systems. This could be caused by unpredictable campaign financing or a

¹¹⁵ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 21-22.

¹¹⁶ David Brady and Jongryn Mo, "Electoral Systems and Institutional Choice," Comparative Political Studies 24, no. 4 (January 01, 1992), 406.

¹¹⁷ Brady and Mo, 425.

¹¹⁸ Richard S. Katz, "Why are there so Many (Or so Few) Electoral Reforms?," in *The Politics of Electoral Systems*, eds. Michael Gallagher and Paul Mitchell (Oxford; New York: Oxford University Press, 2005), 61-62. ¹¹⁹ Brady and Mo, 406.

rapidly changing debate over issues.¹²⁰ If this is the case, even seemingly strong parties will prefer proportional systems that guarantee them some representation if they are less successful at the polls. In this sense, uncertainty aligns the interests of large and small parties.¹²¹ Colomer finds that in the case of post-communist countries, this alignment of interests did not lead to cohesion around a single type of electoral system. Rather, there was "a general tendency toward an increase in the elements of pluralism and division of powers throughout."¹²²

Non-interest-based causes

Though interest-based theories dominate the literature, scholars do address other causes of electoral system change. One category of causes is normative in nature; it deals with the values of those designing the electoral system. Katz calls these causes ontological factors. "Differing electoral systems reflect differing conceptions of democracy and democratic values and therefore ask politicians and voters alike to think about elections, and their place in them, differently."¹²³ Benoit lists several normative qualities for electoral systems: they should provide fair representation¹²⁴, they should ensure governability¹²⁵, they should encourage conciliation between groups¹²⁶, they should be understandable by voters, and they should minimize costs.¹²⁷ This list mirrors the normative effects electoral systems are said to have. That is no accident: scholars who think certain systems produce certain outcomes assume that electoral system designers have those outcomes in mind when designing electoral systems.

¹²⁰ Brady and Mo, 406-407.

¹²¹ Josep Maria Colomer, "Strategies and Outcomes in Eastern Europe," Journal of Democracy 6, no. 2 (1995), 210.

¹²² Colomer, 84.

¹²³ Katz, 4-5.

¹²⁴ Kenneth Benoit, "A Theory of Electoral Systems," World Democratization Conference (February 16-19, 2000), 6. ¹²⁵ Ibid.

¹²⁶ Ibid., 7.

¹²⁷ Ibid.

There may be structural constraints to the range of electoral systems from which a country may choose. According to Lundell, certain electoral system types are more compatible with certain forms of government (including the type of executive) than with other forms of government. Plurality systems seem to go with both parliamentary and presidential systems, and proportional systems are especially unlikely to go with presidential systems.¹²⁸ As discussed in the section on the effects of electoral systems, systems of government that concentrate power in the executive are likely to dull the effects of PR systems. Were electoral system designers guided by values, it would seem strange to choose these two, contradictory values.

Two further constraints on the available options may be a country's historical experience with various electoral systems and foreign influence on the choice of electoral system. Birch writes that countries that had a positive experience with a type of electoral system are likely to want to continue or reinstitute that system, that this effect will be more pronounced the more recent the positive experience¹²⁹, and that the effect will be still greater if decision-makers are under pressure to design an electoral system quickly.¹³⁰ Benoit agrees with the last point, in particular: in times of democratic transition, electoral system designers may grasp at past experience, "finding these solutions 'focal' in the midst of intense pressure and institutional crisis."¹³¹ Along the same lines, Lundell writes that bad historical experiences may lead certain electoral systems to be "omitted from the menu"¹³², and Brady and Mo write that they are "not likely to be on the table."¹³³

¹²⁸ Lundell, 98.

¹²⁹ Birch, Embodying Democracy :Electoral System Design in Post- Communist Europe, 10.

¹³⁰ Ibid., 12.

¹³¹ Benoit, "A Theory of Electoral Systems," 7-8.

¹³² Lundell, 46.

¹³³ Brady and Mo, 406.

The two types of foreign influence mentioned in the literature are colonial diffusion (the use by former colonies of their former colonizers' electoral systems) and regional diffusion (the influence of regional approaches on a democratizing country).¹³⁴ While there are indeed correlations (as discussed in Chapter 3), some scholars argue that foreign influence is unlikely to be a direct cause of electoral system change. Birch writes that a high level of domestic expertise in electoral systems may limit the degree of foreign influence, as might a low level of cultural affinity with the former colonial power or regional model. Birch concludes that direct copying is unlikely; rather, outside influences are one of many factors that may contribute to the form of electoral systems.¹³⁵ Horowitz agrees that often countries are "impervious to whatever international wisdom has been purveyed."¹³⁶ Benoit does not attempt to resolve this issue and instead writes, tautologically, "External influences may explain the choice of electoral system when forces outside the national political context are determining in the choice of electoral institutions."¹³⁷

Scholars briefly mention a range of miscellaneous cause of electoral system change. Some electoral systems have greater administrative costs than other systems.¹³⁸ Economic groups may agitate for guaranteed inclusion.¹³⁹ An expert panel could recommend a change for technical or administrative reasons.¹⁴⁰ Benoit writes the cause can also be "accident, whim, error, or other idiosyncratic circumstances that can be regarded as historically unique."¹⁴¹

What tends to get the least scholarly attention of all is the potential impact voters may have on encouraging electoral system change. Norris is rare in attributing much influence to

¹³⁴ Lundell, 86.

¹³⁵ Birch, Embodying Democracy :Electoral System Design in Post- Communist Europe, 13.

¹³⁶ Horowitz, 17.

¹³⁷ Benoit, "A Theory of Electoral Systems," 9.

¹³⁸ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 14.

¹³⁹ Benoit, "A Theory of Electoral Systems," 9.

¹⁴⁰ Ibid.

¹⁴¹ Ibid., 10.

public pressure. She writes that "democratic aspirations in society (support for democracy as an ideal measured from the early-to-mid 1990s) was the most powerful and significant cultural predictor of subsequent electoral changes (occurring in the period from 1993 to 2004)."¹⁴² Birch's study comes to the opposite conclusion: "A feature common to electoral reform in all the states considered here is the lack of extensive popular involvement."¹⁴³ According to Birch, this has two, contradictory effects. Because voters are not interested in or engaged with the electoral system design process, leaders feel free to pursue their own individual interests. At the same time, without the glare of the public spotlight, leaders may feel secure enough to compromise across dividing lines.¹⁴⁴ Alan Renwick offers support to both arguments. Public engagement is possible, but it is likely to occur only in the instance of "significant system failure" that clarifies the need for a change.¹⁴⁵

The final option (an option supported by the findings in Chapter 3) is that there is no clear explanation for electoral system change other than the passage of time. We know more countries are moving in the direction of proportionality than away from it.¹⁴⁶ And we cannot explain that movement on an aggregate level, since we recognize the unique context of each country. So we assume proportionality is destiny, or something close to it. Boix attempts to link this trend to grand historical episodes: "the extension of universal suffrage (Western Europe in the 1910s or new democratic nations in the postwar period); the introduction of competitive elections (Eastern Europe and several African nations in the 1990s); a massive political realignment among voters (the rise of socialism at the turn of the century or today's rise of

¹⁴² Pippa Norris, "Cultural Explanations of Electoral Reform: A Policy Cycle Model," *West European Politics* 34, no. 3 (May 2011), 542.

 ¹⁴³ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 184.
 ¹⁴⁴ Ibid.

¹⁴⁵ Alan Renwick, *The Politics of Electoral Reform : Changing the Rules of Democracy* (Cambridge U.K.; New York, N.Y.: Cambridge University Press, 2010), 67.

¹⁴⁶ Lijphart, 54.
protectionist parties...); and a high turnover in party organizations."¹⁴⁷ The passage-of-time argument is at once despondent and hopeful. It recognizes that we lack a coherent theory to explain all electoral system changes, but it also sees the parallel trend toward the strengthening of democracy.¹⁴⁸

The above discussion concerned the causes of electoral system change. To describe the lack of electoral system change, scholars use the broad term "path dependence." The general concept is that the costs necessary to change the electoral system — legal constraints, the spending of political capital, the reputational risk — outweigh the potential benefits to the actors with the power to change the system.¹⁴⁹ Any delay caused by the political system can derail change to the electoral system.¹⁵⁰ The literature does not explain how to value the component costs and benefits of retaining an electoral system or changing it.

According to Gerard Alexander's rationalist form of path dependence, either the same costs and benefits apply to all actors, or they are heterogeneous but the actors who would see a greater benefit in changing the system must also overcome a greater cost. ¹⁵¹ In either case, no change is made. Renwick divides path dependence into two categories: exogenous and endogenous. Exogenous path dependence includes Alexander's factors discussed above, as well as the high set-up and learning costs a new electoral system would entail, and the accumulated legitimacy of the existing system.¹⁵² Endogenous path dependence explains how initiatives to change electoral systems can be self-reinforcing. If all actors would prefer a change to the electoral system but there is no consensus alternative, whatever idea is generated first may

¹⁴⁷ Boix, 621.

¹⁴⁸ Reynolds, *Designing Democracy in a Dangerous World*, 77.

¹⁴⁹ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 20.

¹⁵⁰ Rahat, 531.

¹⁵¹ Gerard Alexander, "Institutions, Path Dependence, and Democratic Consolidation," *Journal of Theoretical Politics* 13, no. 3 (July 01, 2001), 254.

¹⁵² Renwick, 81-82.

generate significant traction. Similarly, if actors make public commitments to reforming the electoral system, they may feel pressure to deliver change, even if change does not suit their individual interests¹⁵³, "causing early events to constrain subsequent developments."¹⁵⁴

Though she uses different terminology, Birch describes how stable path dependence can turn into path dependence that encourages change. "Actors may change their cost-benefit perceptions through learning and experience, including the emergence of unexpected consequences. The power or cohesion of the elite may weaken. Changes may occur in the values or subjective beliefs of actors."¹⁵⁵ There is little specificity in this concept. Whether electoral systems stay the same or change, scholars can identify the cause as path dependence.

Lastly, scholars argue that some causes are likely to dominate initially and then recede in importance as the reform process develops. In the case of post-communist countries, Birch separates the initial period of democratization from the period of greater stability and certainty that followed.¹⁵⁶ In the first period, political parties were weak, electoral outcomes were unpredictable, and there were shared normative goals for electoral systems.¹⁵⁷ Actors' main concern was "that they remain in the electoral game"¹⁵⁸, so they advocated for systems of inclusion. Taagepera also writes that parties' self interests, as well as other intervening causes of electoral systems, can change over time:

- Phase 0: The democratizing elites take the pre-existing electoral rules for granted. They see no cause for change and hence no need for outside advice or information.
- Phase 1: Unaware of the variety of electoral rules used by stable democracies, the elites try to reinvent the wheel, grasping at some simple formula that seems the only sensible one.

¹⁵³ Ibid., 83-84.

¹⁵⁴ Ibid., 79.

¹⁵⁵ Birch, Embodying Democracy : Electoral System Design in Post- Communist Europe, 21.

¹⁵⁶ Ibid., 18.

¹⁵⁷ Ibid.

¹⁵⁸ Ibid., 19.

- Phase 2: As homespun electoral rules backfire or more radical reformers replace the early ones, the multitude of options sinks in. foreign advice is eagerly invited and sometimes overvalued.
- Phase 3: As the united front of reformers fractionalizes, electoral rules become a political football. Emphasis is on perceived short-term goals, leading to counterproductive results when the relative strengths of groupings change.
- Phase 4: A more balanced use of political science advice develops, provided that democracy survives Phase 3, as local academics develop expertise in electoral rules, in tandem with growing practical experience.¹⁵⁹

Birch writes that rational causes explain divisions and competition over electoral system design, and that contextual causes will affect actors in a more homogenous way.¹⁶⁰ There is no rule for which will be more consequential in all circumstances.

Do electoral systems have independent effects?

Some scholars write about the effects of electoral systems, and others write about the causes of electoral systems. As is clear from this review, there are also scholars who write about both effects and causes. However, there is little serious discussion about the relationship between these two avenues of inquiry. If we accept that electoral systems are not exogenous, that something within the system causes them to change, can we be confident that electoral systems have independent effects? Or is it possible that whatever causes electoral systems to change also causes the observed outcomes? Birch considers this dilemma and dismisses it:

In one sense the problem is an illusion, as electoral outcomes cannot in and of themselves 'cause' electoral reform in isolation from perceptions of the likely effects of that reform. Politicians will only seek to redesign electoral systems to achieve certain ends if they believe in the causal efficacy of electoral systems themselves. If they are correct in anticipating the outcomes of reform (which is often not the case), then the causal efficacy

¹⁵⁹ Rein Taagepera, "Designing Electoral Rules and Waiting for an Electoral System to Evolve," in *The Architecture of Democracy :Constitutional Design, Conflict Management, and Democracy*, ed. Andrew Reynolds (Oxford, UK; New York: Oxford University Press, 2002), 251-252.

¹⁶⁰ Birch, Embodying Democracy :Electoral System Design in Post- Communist Europe, 23.

of electoral systems is validated. If they are incorrect, and electoral reforms have consequences they have not anticipated, then the problem disappears.¹⁶¹

Electoral systems have independent effects because politicians believe they have independent effects. Otherwise, why would they expend so much time, energy, and resources pursuing certain electoral system changes? This line of reasoning is unsatisfactory. As discussed above, political actors base their decisions on perceptions of self interest that are clouded by uncertainty and change over time. Surely beliefs about electoral system effects will also fluctuate. Which effects are the real ones? Put another way, the work required to change the electoral system — strengthening party unity, building coalitions, educating the public — may be more consequential than any mechanical or psychological effects that succeed the actual change in electoral system. Alexander summarizes others scholars' attempts to resolve this problem: Electoral system change can be understood as endogenous. Once in place, though, electoral systems shape how actors perceive the political system and affect their incentives.¹⁶² But this still does not address the possibility that other factors are more relevant in both phases.

Taagepera is similarly skeptical that electoral systems have independent effects. Regardless of the electoral system adopted, actors learn to work within, and to circumvent, the system to maximize their benefits. "Familiarity breeds stability...in particular, over the long run, most plurality systems are not as unrepresentative as their detractors say, and most PR systems are not as unstable as their detractors say. If there is instability or lack of representativeness, the roots often lie elsewhere, so that no electoral system could do much about it."¹⁶³ Rae agrees, calling electoral systems "only one of an infinite array of competing factors"¹⁶⁴, and Benoit

¹⁶¹ Sarah Birch, *Electoral Systems and Political Transformation in Post- Communist Europe* (New York: Palgrave Macmillan, 2003), 17-18.

¹⁶² Alexander, 251.

¹⁶³ Taagepera and Shugart, 218.

¹⁶⁴ Rae, 134.

writes that "this casts serious doubt on conclusions about the independent causal effect that electoral systems exert on party systems."¹⁶⁵

The most interesting aspect of this issue is how often the same scholars write about both effects and causes, in the same book or article or in separate works, without seriously considering the logical difficulties. Table 1 divides the authors cited in this paper into four quadrants, based on whether they treat electoral system change as exogenous or endogenous and whether they claim electoral systems to have independent effects. Some scholars appear in multiple quadrants. For example, Reilly writes: "The constituent elements of any electoral system — such as the formula for translating votes into seats, the way electoral districts are drawn, the structure of the ballot, and the extent to which voting is candidate or party-centered — all exert an independent influence on the behavioural incentives facing political actors, and hence on the development of political parties and the kinds of campaign strategies used by them."¹⁶⁶ But with Reynolds and Ellis, Reilly writes: "The overall effects of other variables, particularly a country's political culture, usually have a much greater impact on its democratic prospects than institutional factors such as electoral systems."¹⁶⁷

Other scholars at first describe electoral systems' effects as independent, and then they add exceptions and conditions. Jørgen Elklit writes, "A crucial factor when it comes to explaining the level of electoral quality and the electoral institution's independent contribution to democratic consolidation appears to be the democratic intent and seriousness of the relevant political and administrative elites — in combination with respect for the rule of law."¹⁶⁸ Along

¹⁶⁵ Kenneth Benoit, "Electoral Laws as Political Consequences: Explaining the Origins and Change of Electoral Institutions," *Annual Review of Political Science* 10, no. 1 (June 2007), 367.

¹⁶⁶ Ben Reilly, *Democracy and Diversity: Political Engineering in the Asia-Pacific* (Oxford; New York: Oxford University Press, 2006), [xiv], 97.

¹⁶⁷ Reynolds, Reilly, and Ellis, 162.

¹⁶⁸ Jørgen Elklit, "Electoral Institutional Change and Democratization: You can Lead a Horse to Water, but You can't make it Drink," *Democratization* 6, no. 4 (12/01; 2011/11, 1999), 47.

similar lines, Birch writes that elections are "one of the key means" to consolidate democracy, but that the old regime must be completely dismantled to observe the effects of elections on a democratic transition.¹⁶⁹ Birch also writes that electoral systems can have a "decisive influence," but that influence will be strongest in newly competitive political systems.¹⁷⁰ Electoral systems seem to have independent effects only when "independent" really means "dependent."

There is a general unwillingness in the literature to consider the difference between correlation and causality. Michael Gallagher ignores the distinction: "Beyond doubt, the choice of a particular electoral system will make certain patterns of politics more likely and make others less likely."¹⁷¹ Birch acknowledges the distinction but does not address it directly: "I do not wish to speculate as to how much electoral systems promote democracy in these cases, and to what extent democratic countries choose more democratic electoral systems...But there is in any case a clear association between more democratic political arrangements and electoral systems that reflect multiple values by combining voting for individuals and parties, and in so doing deliver a proportional result.¹⁷²

This is more than an academic oversight. There are clear policy consequences of faulty assumptions. Reilly writes that political engineering to promote stability and effectiveness is "a common strategy."¹⁷³ I accept that definitively disentangling the effects and causes of electoral systems is impossible. No social phenomenon is truly exogenous, yet there are effective social policies. My point is that the field of electoral systems has not seriously engaged this debate. Contrary to Shugart's claim quoted at the beginning of this chapter, the field is as of yet not

¹⁶⁹ Birch, "Single-Member District Electoral Systems and Democratic Transition," 296.

¹⁷⁰ Birch, Electoral Systems and Political Transformation in Post- Communist Europe, 3.

¹⁷¹ Michael Gallagher, "Conclusion," in *The Politics of Electoral Systems*, eds. Michael Gallagher and Paul Mitchell (Oxford; New York: Oxford University Press, 2005), 575.

¹⁷² Sarah Birch, *Electoral System Change in New Democracies*, Ontario Citizens Assembly, 2006, 5.

¹⁷³ Reilly, Democracy and Diversity: Political Engineering in the Asia-Pacific, 21.

mature in this regard. Electoral system scholars should study the relationship between effects and causes. Practitioners need to know if their advice is based on relevant experience and sound social science reasoning, and if their efforts are efficient or misdirected.

This paper proceeds as follows: In Chapter 2 I focus on one particular purported psychological effect of electoral systems: women's representation in parliament. Using a type of computer modeling called System Dynamics, I integrate the conclusions of scholars who write about electoral systems' independent effects. The model highlights the nuances and caveats in these scholars' arguments and the challenges of translating those arguments into policy action. In Chapter 3 I quantitatively address the question of whether or not electoral systems have independent effects. I replicate the econometric findings in Norris's work, and then I show that these findings depend on a faulty qualitative model, as well as on data that, though widely used, is not uniform in quality. In Chapter 4 I examine the case of the ongoing development of Nepal's electoral system. This case study, based on interviews with members of parliament, civil society leaders, and international experts, clearly demonstrates the endogenous nature of electoral system change. In this paper's conclusion, I offer some words of caution and recommendations for international actors concerned with democratic development.

	Electoral systems have independent	Electoral systems do not
	effects	have independent effects
Treat electoral systems as exogenous	Dummett	Chang*
	Ariga*	Horowitz
	Birch*	Katz
	Blanc, Hylland, and Vollan	Lijphart*
	Bogaards	Myerson*
	Chattopadhyay and Duflo* (natural	Norris*
	experiment)	Reilly
	Colomer	Welch and Studlar*
	De Paola, Scoppa, and Lombardo*	
	(natural experiment)	
	Elklit	
	Horowitz	
	Jones*	
	Kostadinova*	
	Marien*	
	Massicotte and Blais	
	Matland and Studlar*	
	Meisburger	
	Moser and Scheiner*	
	Nishikawa*	
	Norris	
	Persson*	
	Reilly	
	Reynolds	
	Reynolds and Carey	
	Shugart	
	Shugart*	
	Thames*	
	Tripp and Kang*	
Endogenous	Birch	Benoit
	Boix*	Katz
	Bowler, Donovan, and Karp*	Rae*
	Brady and Mo*	Renwick
	Colomer	Reynolds, Reilly, and Ellis
	Farrell	Taagepera and Shugart*
	Lundell*	
	Mozaffar*	
	Norris*	
	Reilly and Reynolds	
	Rokkan	
	Tushnet	

Table 1: Scholarly literature on electoral systems

Note: * indicates quantitative studies. Not all scholars listed here explicitly address both dimensions of this table. In those cases, I inferred the scholars' placement from their implicit assumptions.

2 MODELING THE EFFECTS OF ELECTORAL SYSTEMS

In the previous chapter, I discussed several of what Duverger calls psychological effects of electoral systems, or ways in which the electoral system incentivizes political parties. In this chapter I focus on one of those effects: the effect of electoral systems on the political representation of women. Many scholars have studied this connection and proposed various components of electoral systems as drivers of increased women's representation. My goal here is to synthesize these scholars' work into a formal model, and to see if the degree of scholarly consensus merits bold policy intervention on behalf of this and other goals of democratic development.

Before proceeding, it is necessary to restate the thesis of the previous chapter. It is unlikely that electoral systems have effects independent of other aspects of the political and social system of a given country. That claim holds for this chapter, as well. The model developed in this chapter does not prove a causal relationship between electoral systems and women's representation. No model could. Rather, the model presents the existing theories as a sort of combined hypothesis. The model can be tested, improved upon, or disproved altogether.

This chapter proceeds as follows: First, I review the literature on the effect of electoral systems on women's political representation. Second, I provide a brief introduction to the field of System Dynamics, which I use to construct the model. Third, I present the model in its static form and discuss several of the relationships it illustrates. Fourth, I show the outputs from the model and to which variables these outputs are most sensitive. Fifth, I test the validity of the model. I conclude by discussing the model's contribution to the debate over whether or not electoral systems have independent effects.

The psychological effect on women's representation

The purposes of increasing women's representation in parliament are too numerous to give justice here. Maria De Paola, Vincenzo Scoppa, and Rosetta Lombardo write that female legislators raise issues have priorities that male legislators simply do not.¹⁷⁴ Raghabendra Chattopadhyay and Esther Duflo make use of data from a natural experiment in local legislative bodies in India and conclude that women produce different policy outcomes than do male legislators.¹⁷⁵ Female legislators may also be less corrupt than male legislators.¹⁷⁶ There are certainly normative rationales, as well. The focus of this chapter is not on why to raise women's representation but on how to do so. How do electoral systems change political parties' incentives to nominate female candidates, and how do electoral systems change women's incentives to get engaged in politics and run for office?

Pippa Norris explains women's representation with three factors: the political system, including the electoral system; the party context, including parties' ideologies; and the recruitment process.¹⁷⁷ The first factor is discussed here; the second and third are beyond the scope of this paper but are included in the model. Within the first factor, Norris writes that three components of electoral systems likely affect women's representation: whether votes are cast for individuals or parties, the district magnitude, and the degree of proportionality.¹⁷⁸ In the previous chapter we saw how ballot structure is linked to district magnitude and how district magnitude is linked to proportionality. The model in this chapter incorporates these relationships.

¹⁷⁴ Maria De Paola, Vincenzo Scoppa and Rosetta Lombardo, "Can Gender Quotas Break Down Negative

Stereotypes? Evidence from Changes in Electoral Rules," *Journal of Public Economics* 94, no. 5–6 (6, 2010), 344. ¹⁷⁵ Raghabendra Chattopadhyay and Esther Duflo, "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India," *Econometrica* 72, no. 5 (2004), 1409-1443.

¹⁷⁶ De Paola, Scoppa, and Lomardo, 345.

¹⁷⁷ Pippa Norris, "Conclusions: Comparing Legislative Recruitment," in *Gender and Party Politics*, eds. Joni Lovenduski and Pippa Norris (London; Thousand Oaks, Calif.: Sage Publications, 1993), 309-330.

¹⁷⁸ Norris, "Conclusions: Comparing Legislative Recruitment," 313.

Assessing the first component Norris mentions, Frank C. Thames and Margaret S. Williams find that systems that require voters to vote for parties instead of individuals have higher women's representation.¹⁷⁹ When female candidates are chosen by party leaders as part of a list of candidates, they are more likely to be successful than when they have to seek individual votes. Mark P. Jones thus finds that, within PR systems, closed lists are more favorable to women candidates than are open lists.¹⁸⁰ Richard E. Matland and Donley T. Studlar propose another reason PR systems may be more favorable: Party leaders decided whether or not to nominate women based on cost-benefit calculations. In single-member districts with plurality systems, nominating a woman means not nominating a man. In PR systems, there is less of a risk. Nominating a woman just adds a name to the party's list; the party can still rely on the men on its list to generate support. Further, through a process they call microcontagion, Matland and Studlar write that parties will be sensitive to the behavior of other parties. When one party begins adding women to its list, other parties will follow suit. And since PR systems are more likely to see initial movement, they are more likely to see microcontagion, as well.¹⁸¹

In another paper, Richard E. Matland and Michelle M. Taylor assess Norris's second component. They question the independent effect of district magnitude. They write that higher district magnitudes are correlated with larger (and presumably more powerful) political parties, and that it is the size of political parties that really affects women's representation.¹⁸² This seems to present a bit of a contradiction. Larger parties connote fewer parties. And fewer parties are the

¹⁷⁹ Frank C. Thames and Margaret S. Williams, "Incentives for Personal Votes and Women's Representation in Legislatures," *Comparative Political Studies* 43, no. 12 (December 01, 2010), 1593.

¹⁸⁰ Mark P. Jones, "Gender Quotas, Electoral Laws, and the Election of Women," *Comparative Political Studies* 42, no. 1 (January 01, 2009), 76.

¹⁸¹ Richard E. Matland and Donley T. Studlar, "The Contagion of Women Candidates in Single-Member District and Proportional Representation Electoral Systems: Canada and Norway," *The Journal of Politics* 58, no. 3 (Aug., 1996), 728-729.

¹⁸² Richard E. Matland and Michelle M. Taylor, "Electoral System Effects on Women's Representation," *Comparative Political Studies* 30, no. 2 (April 01, 1997), 206.

theorized results of less proportional electoral systems. So perhaps Matland and Taylor envisage an intermediate zone: several large parties, rather than just two large parties or a system with one large party and many tiny ones. This would be similar to Cecilia Bylesjö, Rumbidzai Kandawasvika-Nhundu, and Stina Larserud's concept of party magnitude: if each party knows it will likely win many seats, it is more likely to put women on its list. Small party magnitudes would encourage parties to play it safe and only list men.¹⁸³ Susan Welch and Donley T. Studlar also examine district magnitude, but using subnational legislative bodies. They find that whether or not there are more female candidates in multi-member districts, the turnover rates are the same as in single-member districts. Still, they conclude, "in no system examined does the singlemember district system increase the probability that women will run for and win office."¹⁸⁴ Andrew Reynolds looks at Norris's third component and finds that, all else equal, increasing the degree of proportionality increases the proportion of women in parliament by almost 8 percent.¹⁸⁵

In addition to the formal components of electoral systems, what the previous chapter called artificial measures, such as quotas, can also increase women's representation in parliament. Quotas can refer to requirements to field a certain percentage of female candidates or to requirements to fill a certain percentage of parliamentary seats with women.¹⁸⁶ Jones writes that where the first type of quota applies but the second does not, the effect on women's representation is minimal. "While quota legislation without a placement mandate can have a

¹⁸³ Cecilia Bylesjö, Rumbidzai Kandawasvika-Nhundu and Stina Larserud, *Electoral System and Quotas in Nepal*International IDEA,[2010]), 9-10.

¹⁸⁴ Susan Welch and Donley T. Studlar, "Multi-Member Districts and the Representation of Women: Evidence from Britain and the United States," *The Journal of Politics* 52, no. 2 (May, 1990), 405-406.

¹⁸⁵ Reynolds, *Designing Democracy in a Dangerous World*, 77.

¹⁸⁶ De Paola, Scoppa, and Lomardo, 345-346.

positive effect, this legislation overly relies on the good will of the political parties."¹⁸⁷ Aili Mari Tripp and Alice Kang write that quotas may have been more important than the other components in the increase in women's representation seen in recent decades.¹⁸⁸ Jones similarly finds that quotas increase women's representation in both closed list and open list PR systems.¹⁸⁹ With the benefit of a dataset from a natural experiment in Italy, where quotas were introduced in some places and then removed, De Paola, Scoppa, and Lombardo conclude that quotas can have a lasting effect on the political system. "The results of our estimates show that even after gender quotas were abolished, the municipalities affected by the reform continued to return a significantly higher female political representation than municipalities in the control group."¹⁹⁰

System Dynamics modeling of public policy decisions

System Dynamics, developed by Jay Forrester and taught predominately at MIT's Sloan School of Management, is most often used to describe and improve upon business practices, such as project or supply chain management. However, it is also regularly applied to issues of social policy. Indeed the field's most noteworthy application was to examine the repercussions of global population growth.¹⁹¹ System Dynamics explains systems. The first step, then, is to define what is called the model boundary: What is in the system? What will the model not attempt to explain? The model under consideration could be affected by exogenous factors, such as population growth or a public policy decision; they are not generated by the behavior of the model. Or the model could represent a microcosm of a larger system. In this case even

¹⁸⁷ Mark P. Jones, "Quota Legislation and the Election of Women: Learning from the Costa Rican Experience," *The Journal of Politics* 66, no. 4 (Nov., 2004), 1220.

¹⁸⁸ Aili Mari Tripp and Alice Kang, "The Global Impact of Quotas," *Comparative Political Studies* 41, no. 3 (March 01, 2008), 358.

¹⁸⁹ Jones, "Gender Quotas, Electoral Laws, and the Election of Women," 75.

¹⁹⁰ De Paola, Scoppa, and Lomardo, 352.

¹⁹¹ Donella H. Meadows, Club of Rome and Potomac Associates, *The Limits to Growth : A Report for the Club of Rome's Project on the Predicament of Mankind*, 2d ed. (New York: Universe Books, 1974), 205.

endogenous factors could be omitted for simplicity's sake. The purpose of the model could dictate a specific focus.

Within the model, systems are explained by stocks and flows. Stocks represent accumulations — of greenhouse gasses, of technical experience, of products in a warehouse. Flows are increases or decreases in stocks; they are rates of change. Therefore, flows communicate both what is changing and the timeframe of the change. Examples of flows are greenhouse gas emissions, average time in a certain job, and product shipments. The only way stocks change is as a result of flows. Other factors, either exogenous or endogenous, may affect flows. A new mileage standard for cars may reduce emissions, an increase in employee compensation may discourage high turnover, and new order fulfillment methods could speed up shipments. The most powerful aspect of System Dynamics is its connection of all these components into causal loops. Some causal loops are reinforcing: the more interest that is earned on a bank deposit, the more capital there is to earn interest and the more interest is earned in the next period. Other loops are balancing, in that they tend toward a goal or oscillate around a level: population growth gradually exhausts carrying capacity, slowing population growth; or reductions in emissions reduce public pressure for further reductions. System Dynamics can be used to portray these relationships conceptually or, as in the model in this chapter, quantitatively. The latter approach can give some insight into which causal loops are likely to dominate under which circumstances, laying the theoretical groundwork for potential policy interventions.

There is a deep literature by scholars and practitioners of System Dynamics on approaches to validating the structure and behavior of System Dynamics models. The common refrain is that it does not matter whether or not a model represents reality perfectly. What matters is that a model is found to be useful for a given purpose, which, Yaman Barlas writes, "is

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essentially nontechnical, informal, qualitative process.¹⁹² This seems dismissive of any standardized, rigorous inquiry, but the essential debate really is philosophical. As Yaman Barlas and Stanley Carpenter write:

If one adopts a logical empiricist, foundationalist philosophy of model validation, then validation is seen as a strictly formal, algorithmic, reductionist, and "confrontational" process. Since the model is assumed to be an objective and absolute representation of the real system, it can be either true or false. And given that the analyst uses the proper validation algorithms, once the model confronts the empirical facts, its truth (or falsehood) is automatically revealed. Validity becomes a matter of formal accuracy rather than practical use. If one takes a relativist, functional, holistic philosophical approach, then validation becomes a semiformal, conversational process. A valid model is assumed to be only one of many possible ways of describing a real situation. No particular representation is superior to all others in any absolute sense, although one could prove to be more effective. No model can claim absolute objectivity, for every model carries in it the modeler's world view. Models are not true or false but lie on a continuum of usefulness. Model validation is a gradual process of building confidence in the usefulness of a model; validity cannot reveal itself mechanically as a result of some formal algorithms. Validation is a matter of social conversation, because establishing model usefulness is a conversational matter.¹⁹³

Barlas suggests three stages of tests of model validity. The first stage is direct structure testing. Within this stage are four tests. The *structure confirmation* test asks whether the relationships, as well as any equations, portrayed in the model correspond to the relationships observed in the real system or theorized in the literature. "The information needed for this type of comparison is highly qualitative in nature; it cannot be captured simply by a set of numerical data."¹⁹⁴ *Parameter confirmation* testing involves comparing the actual variables in the model to aspects of the real system. "Conceptual confirmation means being able to identify elements in the real system that correspond to the parameters of the model."¹⁹⁵ *Direct extreme-condition*

¹⁹² Yaman Barlas, "Formal Aspects of Model Validity and Validation in System Dynamics," *System Dynamics Review* 12, no. 3 (1996), 184.

¹⁹³ Yaman Barlas and Stanley Carpenter, "Philosophical Roots of Model Validation: Two Paradigms," *System Dynamics Review* 6, no. 2 (1990), 157.

¹⁹⁴ Barlas, 190.

¹⁹⁵ Barlas, 190.

testing evaluates whether the model allows for extreme events.¹⁹⁶ *Dimensional consistency* tests are related to parameter confirmation: they check that no variables have been added to the model to get equations to work that do not exist in real life.¹⁹⁷

Barlas's second stage is structure-oriented behavior testing. There are four of these. *Extreme-condition* tests assign extreme values to certain parameters and compare the model outcome with the outcome in the real system. *Behavior sensitivity* tests consist of "determining those parameters to which the model is highly sensitive, and asking if the real system would exhibit similar high sensitivity to the corresponding parameters." *Modified-behavior prediction* compares the model's outcomes with real data, if real data exists. *Phase-relationship* tests look at how pairs of model parameters change in relation to each other to make sure the direction of the relationships is the same as in the real system.¹⁹⁸

The third stage is behavior pattern testing. These tests "measure how accurately the model can reproduce the major behavior patterns exhibited by the real system.¹⁹⁹ Barlas cautions against overemphasizing this stage. "Behavior pattern tests are 'weak' tests that provide no information on the validity of the structure of the model."²⁰⁰ This stage must follow successful testing in the two previous stages.²⁰¹ Furthermore, models that attempt to synthesize theory, such as the one in this chapter, may not have corresponding real-world data, so the third stage may be irrelevant.²⁰² Barlas raises two objections to quantitative or econometric tests of model validity, in particular. The first is technical: Because System Dynamics models portray variables that are

¹⁹⁸ Barlas, 191.

²⁰¹ Barlas, 199.

¹⁹⁶ Barlas, 190.

¹⁹⁷ Barlas, 191.

¹⁹⁹ Barlas, 192-193.

²⁰⁰ Barlas, 194.

²⁰² Barlas, 200.

often dependent upon each other, the data is likely to be autocorrelated.²⁰³ The second is philosophical: Statistical testing requires choosing a level of significance, which Barlas rejects as arbitrary. "This type of binary reject/not reject decision in validity testing is very much against the relativist/holistic philosophy of science, which would argue that since validity depends on the purpose of the model, significance level must also be context-dependent."²⁰⁴ Barlas concludes that model validity is in the eye of the beholder: "The model is thus 'judged' to be valid, invalid, or typically somewhere in between, as a result of a gradual, rich, yet semi-formal, semiquantitative process, to which many quantitative statistics serve as inputs."²⁰⁵

Practitioners address further complications with model validity in their application of System Dynamics to real-world problems. One debate is over the relevance of modeling to public policy, which is essentially political process. Navid Ghaffarzadegan, John Lyneis, and George P. Richardson describe the use of System Dynamics modeling as a tool to bring political actors and other stakeholders together. Participants debate and agree upon the major causal links, and they get to see their own positions in the system relative to those of other participants.²⁰⁶ David F. Andersen, who looks at the use of System Dynamics modeling to help resolve negotiations over school finance reform, is less optimistic. When some policymakers stand to lose from changes to the system, they will refrain from describing the system in a way that is like to be disadvantageous to them. Therefore there is unlikely to be consensus on the model's specifications²⁰⁷, and these divergent interests make testing the model difficult²⁰⁸ and any policy

²⁰³ Barlas, 196.

²⁰⁴ Barlas, 198.

²⁰⁵ Barlas, 198.

²⁰⁶ Navid Ghaffarzadegan, John Lyneis and George P. Richardson, "How Small System Dynamics Models can Help the Public Policy Process," System Dynamics Review 27, no. 1 (2011), 40.

²⁰⁷ David F. Andersen, "Analyzing Who Gains and Who Loses: The Case of School Finance Reform in New York State," *System Dynamics Review* 6, no. 1 (1990), 39. ²⁰⁸ Andersen, 27.

recommendations from the model potentially irrelevant.²⁰⁹ Kent Rissmiller offers something of a compromise: The various actors' interests can be incorporated into the model, as can other potential exogenous shocks.²¹⁰ The resulting model may lose some specificity by having broader boundaries, but it may anticipate obstacles to implementing change that a more narrowly focused model would omit.

Another issue with validity is that System Dynamics models often attempt to aggregate many similar systems, a necessary approach when performing cross-country analysis. In their model of state stability, Nazli Choucri, Daniel Goldsmith, Stuart E. Madnick, Dinsha Mistree, J. Bradley Morrison, and Michael D. Siegel combine social science theory with quantitative data. ²¹¹ But this type of application raises concerns. For example, Edward G. Anderson Jr. develops of model of counterinsurgency policy.²¹² The conceptual model is quite persuasive and indeed inspires some aspects of the structure of the model in this chapter. However, Anderson tests the model by comparing its outcomes to data from the Anglo-Irish War of 1919-1921. This is a clear demonstration of the limits of Barlas's third stage of tests. Even if the model can replicate the trends of the Anglo-Irish War, the model tells us nothing about how similar that war is to today's counterinsurgency efforts. Anderson stresses the importance of the quantitative component of his model to his policy recommendations.²¹³ However, his only discussion of the data's relevance is that it is in English, it is declassified, and "unlike the current situations in Iraq and Afghanistan, the insurgency itself was a straightforward conflict, comprised essentially of just one insurgent

²⁰⁹ Andersen, 21.

²¹⁰ Kent Rissmiller, "Approaching a Model of Policy Change: A Challenge to Political Science" (Bergen, Norway, 2000). , 15.

²¹¹ Nazli Choucri et al., "Using System Dynamics to Model and Better Understand State Stability," *MIT Sloan Research Paper no. 4661-07* (2007), 1-39.

 ²¹² Edward G. Anderson, "A Dynamic Model of Counterinsurgency Policy Including the Effects of Intelligence,
Public Security, Popular Support, and Insurgent Experience," *System Dynamics Review* 27, no. 2 (2011), 111-141.
²¹³ Anderson, 112.

group representing one constituency: the Catholic Irish.²¹⁴ If these qualities make this data exception, perhaps the system the model explains is exceptional, as well.

The model

Norris constructs a rudimentary System Dynamics model to illustrate her review of the political system, party context, and recruitment process's effects on women's political representation.²¹⁵ However, it does not follow any formal System Dynamics methodology — it does not distinguish between stocks and flows, for example — and it is not an effective tool for synthesizing theory or testing policy interventions. The remainder of this chapter attempts to remedy those deficiencies.

Before defining the components of the model, it is necessary to delineate the model's boundaries. The goal of the model is to synthesize existing theories about the effects of electoral systems on women's political representation and to test potential means of intervention to speed the process of increasing women's representation. The model boundaries must then be quite broad in the sense that they include the entire process of representation, from women not being engaged in politics through women serving in parliament. At the same time, the focus on electoral systems necessitates treating other factors as exogenous. The specific processes of women's engagement, recruitment, election, and removal from office, then, are not addressed. These details could each be addressed in a future model.

Figure 2.1 shows the key stocks and flows of a System Dynamics model. Starting from the left-hand side, the population growth flow increases the stock of women in the population who are unengaged with politics. As these women get engaged, they flow into the second stock.

²¹⁴ Anderson, 125.

²¹⁵ Norris, "Conclusions: Comparing Legislative Recruitment," 311.

At this stage the rate of engagement depends on three things: the number of unengaged women, the average time it takes for women to get engaged, and a global engagement multiplier. This third variable represents the external influence — global, regional, historical — discussed in the previous chapter. Once women are engaged in politics, they flow into the stock of candidates for office at the rate they are recruited by political parties or leaders. Here recruitment only depends on the number of women engaged in politics and the length of the election cycle, but more variables will be added shortly. Following their recruitment as candidates, women flow into the stock of members of parliament at the election rate, which here is dependent only upon the number of candidates and the election cycle. Once women are in parliament, they can exit in one of two ways: either they retire after a given time in office, or they lose their bid for reelection, in which case they return to the stock of women engaged in politics. The balancing loops in Figure 2.1 convey limits to the flows in the stocks and flows in the system. For example, the retirement rate is defined as the number of women in parliament divided by the average time in office. Therefore, as the stock decreases, the rate of decrease will also slow. Assuming no new women are elected to parliament and none are unseated, the number of women in parliament will quickly and then gradually approach and reach zero. Similarly, more women cannot become engaged than the number of women in the population.



Note: Plus signs indicate positive relationships between variables; minus signs indicate inverse relationships. A "B" with an arrow around it signifies a balancing loop.

The next piece of the model, shown in Figure 2.2, more fully explains the engagement rate. As more women become engaged in politics, the aggregate voting power of women increases. And as women are more politically powerful, more women will seek to become engaged in politics. This dynamic is represented by the reinforcing loop. However, the reinforcing effect of engagement is not likely to be immediate or unlimited. The curvilinear graph in Figure 2.2 shows a hypothesized relationship between voting power and engagement: At low levels of engagement, women's voting power will be minimal. At some inflection point, though, the effect of engaged women on the political process will be significant. As engagement reaches a certain saturation level, the marginal effect of each additional engaged woman on women's aggregate voting power will be small.



Figure 2.2: Women's engagement loop

Note: Plus signs indicate positive relationships between variables; minus signs indicate inverse relationships. An "R" with an arrow around it signifies a reinforcing loop.

The last piece of the basic model dynamics is the recruitment rate. It is at this point where the electoral system finally enters the model. I begin by modeling political parties' propensity to recruit or nominate women as a stock, shown in the center of Figure 2.3. I assume parties will have some baseline propensity; whether it is low or high depends on the country, but this model only examines the system in the aggregate. The flow into this stock, or the change in propensity to recruit women, is affected by five factors. The first is women's voting power. Just as more political power for women would likely lead to further political engagement for women, more power would presumably encourage parties to nominate more women. The second factor is average party size. As discussed earlier in this chapter, Matland and Taylor write that bigger, more powerful parties are more likely to nominate women. The third factor is any quota for nominating women. In the model construction, this quota can be permanent, temporary, or change periodically. The fourth factor is the proportionality of the electoral system. I model proportionality as a function of two components: the ratio of PR seats in parliament to non-PR seats and the district magnitude. Just like the effect of engagement on voting power, though, these relationships are not likely to be linear. As discussed in the previous chapter, Douglas Rae writes that the effect of district magnitude on proportionality is likely to be characterized by decreasing marginal returns. I model the effect of the ratio of PR seats to non-PR seats on proportionality in the same way. As the percentage of seats filled by PR methods approaches 100% of parliament, the effect of electing each additional seat by PR instead of by a non-PR method is not likely to be significant. The final factor that helps determine the change in propensity to recruit women is the election cycle. The longer the period between elections, the less pressure parties will feel to recruit women in a given year.

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Model outputs

The full model required to produce the outputs in this section is too large to display here, but the components discussed above produce the main dynamics. (The full model is in Appendix 1.) Because this model represents electoral systems in general, and not one specific country, the specific numerical values shown here are meaningless. Importantly, the outputs displayed in the figures below should not be taken as predictions. They merely represent my synthesis of the literature. For the model to run, though, the values of some parameters have to be assigned arbitrarily, such as the timeframe for the model, the total size of the population, and the size of parliament relative to the population. Further, I assume there are some women in parliament at the beginning of the timeframe and that men retire from parliament at the same rate as women do.





Note: Plus signs indicate positive relationships between variables; minus signs indicate inverse relationships.

Figure 2.4 shows the effects of the ratio of majoritarian to proportional seats, district magnitude, and the engagement rate on the propensity of political parties to recruit and nominate women. The line at the bottom, in brown, shows the base case of a fully majoritarian system. In this case, political parties have little incentive to nominate women; any slight increase is likely

due to slow external pressures on society, captured in the model by the global engagement multiplier. The second line from the bottom, in black, shows the base case with an increased engagement rate. This could be generated by, on the demand side, a cultural change, or, on the supply side, by an active effort to reach out to unengaged women. That these two lines are nearly indistinguishable over the time horizon of the model suggests that, all else equal, the engagement rate is unlikely to have a strong effect on parties' propensity to recruit women. The third line, in gray, shows a change from a fully majoritarian system to a mixed system, with half the seats allocated by a proportional method. Changing the electoral system in this way, the model and the literature suggest, has a more substantial effect on the propensity to recruit women. The fourth line, in green, shows an increase in the engagement rate at the same time as the switch to a mixed system. Whereas in the fully majoritarian cases the two lines overlapped, here they diverge somewhat more. It is possible that the effect of the engagement rate on the propensity to recruit women increases with the ratio of proportional to majoritarian seats. The final pair of lines, in red and blue, show a change to a mixed system combined with a greater district magnitude. This change also seems to have a substantial effect on the propensity to recruit women. The graph indicates that the effect of district magnitude is less than the effect of the ratio of proportional to majoritarian seats. This may be due to choices made in model specification, so it should not be taken as conclusive. A final point on this graph is that each of the lines is curvilinear. This suggests that the effects of any change to the electoral system, however significant in the long term, are likely to be slow to materialize.





Note: Specific numerical values are arbitrary. The focus is on the model dynamics.

Figure 2.5 shows the effects of these same three variables on the proportion of women in parliament. This outcome is caused by more than just these three variables. As noted above, this model assumes men and women retire from office at an equal rate. Were this assumption to be relaxed, the proportion of women in parliament could rise much more quickly. The first graph shows that, regardless of the electoral system, and absent formal discriminatory rules, societal shifts will likely effect a gradual increase in women's political representation. This synthesis of the literature suggests that the components of electoral systems have only minor effects on women's representation, and only in the long term. (The initial drop in the proportion of women in parliament in this model is due to the insufficient number of female candidates to replace those female officeholders who retire or are unseated. Increasing women's engagement gradually remedies this discrepancy.) The second graph shows a possible explanation: Due to either demand- or supply-side pressures, the number of politically engaged women will likely increase

to a maximum, equilibrium level. This may of course take considerably longer to occur in actual countries than it does in this model. As discussed in regard to Figure 2.2, the increasing engagement of women is likely to have diminishing marginal returns on the voting power of women. So women's voting power will eventually reach a maximum, too. The two graphs in Figure 2.5 do suggest that increasing women's engagement rate will increase the proportion of women in parliament. But increasing that proportion past a certain point will likely depend on factors other than women's political engagement.





Note: Specific numerical values are arbitrary. The focus is on the model dynamics.

Figure 2.6 shows the effect of temporary and permanent quotas studied by De Paola, Scoppa, and Lombardo. A permanent quota, indicated by the blue line in the first graph, has an immediate effect on the change in political parties' propensity to recruit women. As the green line shows, even without a quota, parties are likely to change their propensity to recruit women. But a permanent quota sustainably increases the rate of change. The gap between the blue and green lines is the difference in annual increase in propensity to nominate women between systems with a quota and without. The second graph, therefore, shows the gradually increasing difference in propensity.

The model is less clear with regard to a temporary quota. As expected, a temporary quota, indicated by the red line in the first graph, leads to an increase in parties' propensity to recruit women. (The size of the permanent and temporary quotas is the same: the area between the red and green lines during the five-year pulse is the same as that between the blue and green lines at the time of the step up.) However, this does not seem to have nearly the long-term effect on parties' propensity as does a permanent quota, as the second graph shows. This contradicts the findings of De Paola, Scoppa, and Lombardo. There are two possible explanations: 1) Their study could lack external validity — that is, something distinctive about the case of Italian municipalities would make it ill-suited for generating predictions for other cases. 2) Quotas could affect parties' propensity to recruit women in a way not captured by this model. De Paola, Scoppa, and Lombardo hypothesize that quotas help break down stereotypes. This effect is difficult to define with specificity or quantify. A model more focused on this dynamic could draw on a greater number of cases to incorporate a greater number of relevant variables.

Figure 2.6: Effect of quota on propensity to recruit women



Note: Specific numerical values are arbitrary. The focus is on the model dynamics.

Model validity

I now address the validity of the above model, using Barlas's three stages of tests. 1) The model meets each of Barlas's suggested direct structure tests. Each of the variables and relationships in the model is illustrative of a variable or relationship in the literature. Though running the model required assuming some parameter values, it did not require the creation of any dummy variables. Further, the structure of the model can accommodate extreme events. 2) The model also meets the structure-oriented behavior tests. Increasing the vote-to-seat threshold, for example, reduced the number of effective parties, increases the average party size, and increases parties' propensity to recruit women. 3) Behavior pattern testing is more difficult because there is no real data with which to compare the model's outputs. As the next chapter shows, there are too few cases of each possible permutation of electoral system components to draw statistically significant conclusions except on an aggregate basis. Even so, the model's outputs seem to be consistent with real-world relationships.

The contribution of modeling

The ultimate test of model validity is whether the model is meaningful for its stated purpose, in this case to illustrate the points of scholarly consensus and identify variables for intervention by practitioners. This model has made two principal contributions. The first is that it shows just how gradual the increase in women's political participation is likely to be, absent quotas on women in elective office in addition to women on party lists. The effects of any nonquota electoral reform are likely to be slow to materialize, though they could be quite significant in the long term. This presents a challenge for designers of electoral systems. After one electoral change is put in place and its effects are not immediately apparent, there may be public or

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political pressure to reverse course or implement a different change. Premature swings in policy may blunt the effects of a particular reform.

This model's other contribution is that it illustrates what is often left implicit in the literature on electoral systems: For women's political representation to increase, women must beat men in elections. This model is limited in that it represents women's voting power, and hence women's election rate and incumbency rate, largely as a factor of women's political engagement. And since engagement is necessarily limited by the population, in this model women's election rate is limited, as well. Therefore, while a strategy for increasing women's political representation in the short term can incorporate efforts to increase women's engagement, a long-term strategy must also result in male voters supporting female candidates. Aside from De Paola, Scoppa, and Lombardo's consideration of breaking down stereotypes, the literature describes political parties' propensity to recruit women as a cost-benefit calculation. But it seems difficult to apply that same logic to male voters. Consideration of potential interventions to get men to vote for women is beyond the scope of this paper, but it is a necessary avenue of research before merely short-term strategies are pursued.

Both of this modeling exercise's contributions have a common theme: electoral reforms, on their own, are unlikely to have the dramatic effects their supporters suggest. Again, nothing in this chapter constitutes definitive, case-based research. Rather, this chapter presented a synthesis of existing theoretical and empirical work. Yet by using a System Dynamics approach, the literature synthesis, the literature's gaps, and its policy relevance are clear. Increasing women's political representation can be accomplished in a number of ways, many of which are likely reinforcing, and none of which is conclusively better than all others in all circumstances. The same is likely true for other psychological effects of electoral systems.

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3 EVALUATING THE EXOGENEITY ARGUMENT

The previous chapter showed some potential dynamics in a world where electoral system change is assumed to be exogenous. Effects may be spread out over time or multiplied by changes in other factors. In this chapter I use an econometric approach to attempt to test these theories. I begin by describing the work of Pippa Norris²¹⁶, who is the most prominent and prolific of electoral system scholars who use econometrics. Norris's model shows countries with proportional electoral systems to be more democratic than countries without PR systems. I find this conclusion to be robust to modifications of Norris's model. However, Norris's model is not helpful for policy analysis: crucially, she does not estimate the effects of adding a PR system. Using this other explanatory variable, however, reveals flaws in the data and in the theoretical model. Because of these flaws, we can have little confidence in the conclusions drawn from this type of analysis. Still, I present models of econometric techniques that would be meaningful to understanding the effects of electoral system change were the problems to be addressed. I intend this chapter to be hopeful: econometric analysis has great potential for the study of electoral systems, but the field is not ready for econometrics yet.

Data

In this chapter I use data from the Quality of Government Dataset (QOG).²¹⁷ QOG is a compilation of several data sources. It includes the dataset Norris compiled and used for her work discussed in this chapter.²¹⁸ The individual sources I use are Norris's own identification of

²¹⁶ Pippa Norris, *Driving Democracy :Do Power-Sharing Institutions Work?* (Cambridge; New York: Cambridge University Press, 2008), 306.

²¹⁷ Jan Teorell et al., *The Quality of Government Dataset* (University of Gothenburg: The Quality of Government Institute, 2011).

²¹⁸ Pippa Norris, *Democracy Time-series Dataset*, (2009).

regime types; Gleditsch's GDP data²¹⁹; Hadenius and Teorell' s data on colonial legacies and geographic regions²²⁰; Alesina et al's data on ethnic fractionalization²²¹; Heston, Summers and Aten's population data²²²; the World Bank's World Development Indicators²²³; the World Bank's Database of Political Institutions²²⁴; a combination of Freedom House²²⁵ and the Polity IV project's²²⁶ indices of democracy; and the UCDP/PRIO Conflict Database.²²⁷ The data cover the time period from 1945 to the present, though some data sets start later or have less recent information. The methodology of each of these sources is subject to critique. For the purposes of this chapter, measurement error is of greater concern, a subject that will be addressed later. However, these are the standard sources for scholars in this field. They provide a necessary starting place for understanding the degree of confidence we may have in our assumptions about the effects of electoral systems.

Norris's model: PR systems vs. non-PR systems

Norris identifies several potential outcomes of electoral systems that promote consociationalism, particularly systems of proportional representation: "Power-sharing electoral institutions are though especially important for accommodating diverse groups, reducing community tensions, and promoting acceptance of peace-settlements in fragmented societies

²¹⁹ Kristian Skrede Gleditsch, *Expanded Trade and GDP Data*, (2004).

²²⁰ Axel Hadenius and Jan Teorell, "Pathways from Authoritarianism," *Journal of Democracy* 18, no. 1 (2007), 143-156.

²²¹ Alberto Alesina et al., "Fractionalization," Journal of Economic Growth 8, no. 2 (2003), 155-194.

²²² Alan Heston, Robert Summers and Bettina Aten, *Penn World Table* (University of Pennsylvania: Center for International Comparisons of Production, Income and Prices,[2009]).

²²³ World Development Indicators (Washington, D.C.: International Bank for Reconstruction and Development,[2008]).

²²⁴ Thorsten Beck et al., *Database of Political Institutions 2010*, (2010).

²²⁵ Freedom in the World, Freedom House, (2009).

²²⁶ M. G. Marshall and K. Jaggers, *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2002: Dataset Users' Manual* (Maryland: University of Maryland, 2002).

²²⁷ N. P. Gleditsch et al., "Armed Conflict 1946–2001: A New Dataset," *Journal of Peace Research* 39, no. 5 (2002), 615-637.

emerging from a recent history of bloody civil war and regime instability."²²⁸ Norris then uses country-level panel data to evaluate whether proportional systems in fact do better than systems without a proportional component. She and I aggregate all electoral systems with a proportional component, including mixed systems; the number of countries with any one ratio of proportional to majoritarian, any one particular formula for allocating seats, or any one district magnitude is too small for meaningful comparison. Further, she is interested in PR systems in the lower house of parliament only. I see no reason to exclude the upper house, if there is one. The division of power between the lower and upper houses is not constant across countries; not analyzing cases in which the upper house has a PR system may miss genuine cases of consociationalism.

Norris's outcome variable of interest is the level of democracy, measured by scales compiled by Freedom House, the Polity IV project, and Vanhanen. Beck and Katz recommend two approaches to accounting for the temporal nature of time-series cross-sectional data: using lagged dependent variables, or correcting for the serial correlation of the errors.²²⁹ Norris uses both approaches; I use only the latter. Using lagged dependent variables may improve the precision of the estimates, but the implications for interpreting the estimates make it impractical. Norris's question becomes nonsensical: did countries that have a PR system now have, on average, higher democracy ratings last year than did countries that do not have a PR system now? For this reason, among others discussed in this chapter, I have chosen to depart from Norris's model.

In her model, Norris controls for several factors likely to be correlated with democracy. As discussed in the next chapter, the system of government is deeply connected with the electoral system. Norris supposes that it constrains the level of democracy, as well. She controls

²²⁸ Norris, 103.

²²⁹ Nathaniel Beck and Jonathan N. Katz, "What to do (and Not to do) with Time-Series Cross-Section Data," *The American Political Science Review* 89, no. 3 (Sep., 1995), 645.

for four types of national leadership: presidential republics, mixed republics, ruling monarchies, and military states. Each of these types is likely to be either unstable and thus not conducive to the entrenchment of democracy, or fundamentally at odds with the norms and institutions of democracy. Norris finds all of these types to be significantly correlated with the level of democracy. As she expects, countries with those systems have, on average, lower levels of democracy than countries without any of those systems (the left-out group is presumably parliamentary democracies), all else equal.²³⁰

Additionally, Norris finds wealth, measured by GDP per capita, to be significantly correlated with democracy.²³¹ She concedes that the direction of causality is unclear: the level of wealth could determine the possible political arrangements, or the way the government is formed could influence government spending and thus market incentives.²³² GDP per capita could also be thought of as an imperfect measure of the degree of a country's openness to the outside world, an issue discussed in the previous chapter. Norris also suggests that countries' colonial legacies play a role in their democratization. Former British colonies perhaps inherited norms of pluralism, as well as democratic institutions themselves, which would make them more likely to be democratic than countries colonized by Spain or Portugal.233

Returning to the idea of openness to outside ideas, Norris includes the degree to which the other countries in a given country's region are democratic. (She and I measure this by taking the mean of a set of indexes of democracy for each region.) Democracy often comes in regional waves, a dynamic Norris hopes to capture. "Countries learn from each other, particularly where

²³⁰ Norris, 152.

²³¹ Ibid., 85.

²³² Ibid., 82.

²³³ Ibid., 86.
there is a shared culture and language."234 Norris identifies the Middle East, however, as such an outlier in democratic development that she controls for that region separately.235 Were she to revise this work now, or in the near future, perhaps she would change this assumption. Norris further hypothesizes that the greater a country's ethnic heterogeneity, the more difficult it will be to govern democratically.236 Many ethnic, religious, or linguistic groups could be difficult to include in the democratic process, requiring authoritarian control. However, it could be argued that a diverse country would be difficult to govern with anything other than a democratic system. A non-democratic government would constantly be battling dissent from excluded sectors of society.

Finally, Norris is concerned with the size of the population and the physical area of each country. She hypothesizes that smaller countries, in both senses, are easier to govern democratically.237 With fewer citizens and a more concentrated citizenry, each individual citizen is likely to perceive a closer connection to elected government, and, since elected representatives are more likely to be personally known by their constituents, they will be more receptive to public opinion. While this is plausible, the opposite is equally so, as with ethnic fractionalization. A non-democratic form of government would find a smaller country easier to govern, as well: fewer people to spy on or pay off, less physical area to serve as havens for dissent or insurrection.

Norris accepts that the social science reasoning underlying each particular correlation may not be conclusive. She holds that quantitative analysis is still instructive, though, assuming it is clear about its assumptions. "Any subsequent models estimating the impact of political

²³⁴ Ibid., 86.

²³⁵ Ibid., 87.

²³⁶ Ibid.

²³⁷ Ibid., 84.

institutions on democratic consolidation will only be properly specified if they incorporate this range of structural conditions, understood as prior controls."238 This is the approach taken in this chapter. The quantitative approach must be investigated thoroughly to determine what lessons, if any, it holds for evaluating electoral systems.

Using this set of controls, Norris tests the hypothesis that having a PR electoral system for the lower house of parliament has a positive, statistically significant effect on a country's level of democracy. She finds that it does: countries with PR systems have a greater level of democracy, across the three indices of democracy she uses, than do those without PR systems, all else equal.²³⁹

Evaluating Norris's model

Above I discussed some modifications to Norris's outcome of interest and covariates. Now I test each of these covariates for individual statistical significance. This lets me replicate Norris's approach and assess its merits. As Table 3.1 shows, the countries with a PR system in any house are different than those without a PR system. Countries with a PR system in any given year are less likely to be presidential or mixed republics and more likely to be monarchies. Statistical testing did not determine whether countries with a PR system are more or less likely to be military states; this does not mean that there is no correlation, only that, with the available data, the relationship is not statistically significant. Countries with a PR system are likely to have lower GDPs, more likely to be former British colonies, and more likely to be in the Middle East. They are also are less likely to be in regions with a high average democracy rating and more likely to be in countries with a higher degree of ethnic fractionalization. The latter correlation

²³⁸ Ibid., 90.

²³⁹ Ibid., 152.

could suggest two things: that many ethnically heterogeneous countries have opted for a PR system to address internal division, or that countries that adopt PR systems see their existing divisions solidify or deepen. Countries with a PR system are likely to have smaller populations, though statistical tests do not support the argument that the physical size of a country is correlated with its electoral system type. In addition to Norris's covariates, I test two others. The first is to make sure that gaps in the data did not disproportionally fall in the PR countries or the non-PR countries; I do not find a significant difference. The second is to test if having an election in a given year was more or less likely in PR countries than in non-PR countries; I find that it was less likely, though with less confidence than for the other covariates.

Table 3.1: Balance tests for PR system in any house						
Mean difference						
between countries with						
	any PR system and					
	those without	T-statistic				
Presidential republics (0/1)	-0.106***	(-6.62)				
Mixed republics (0/1)	-0.0717***	(-3.90)				
Ruling monarchies (0/1)	0.0322***	(6.75)				
Military states (0/1)	0.00827	(1.49)				
Log GDP/capita (US\$)	-0.573***	(-15.93)				
Ex-British colony (0/1)	0.432***	(35.00)				
Middle East (0/1)	0.0552***	(6.29)				
Regional diffusion of democracy	-9.543***	(-16.51)				
Ethnic fractionalization (0-100-pt scale)	0.0915***	(11.47)				
Population size (thous)	-13793.6***	(-4.58)				
Area size (sq mi)	-63972.1	(-0.97)				
Year (normalized to 1945)	-0.357	(-1.19)				
Legislative election held this year (0/1)	-0.0372**	(-2.79)				
Ν	4233					

Note: Significant at * the 0.05 level, ** the 0.01 level, *** the 0.001 level.

I now estimate the difference between countries with PR systems and those without for five outcome variables. The first is Norris's focus, the level of democracy. Norris and I are interested to see if PR systems, in the words of the title of her book, drive democracy. The second is the percentage of women in parliament. As discussed in the previous chapter, much

theoretical and quantitative research has sought to establish this relationship. The third is a measure of the legislative competitiveness: a value of 1 indicates no legislature at all; 2 is an unelected legislature; 3 is an elected legislature with single candidates; 4 is a single party with multiple candidates; 5 means multiple parties are allowed but only one party won seats; 6 means multiple parties won seats but the largest party received more than 75% of the seats; and 7 means the largest party got less than 75%. The goal here is similar to that of the first outcome variable: are PR systems associated with the entrenchment of political parties, or do they foster change? The fourth outcome variable measures whether or not the country was involved in an interstate war: a value of 0 means there was no interstate conflict; 1 means there was a minor conflict; 2 means there was an intermediate armed conflict; and 3 means there was an interstate war. The fifth outcome variable measures internal armed conflicts and has the same scale. The hypothesis for these variables, as discussed in the first chapter, is that by guaranteeing ethnic groups representation in government, PR systems decrease the incentives to fight and increase the incentives for elite-level bargaining. I control for the covariates that were significantly correlated with PR systems. I also control for the year variable: it may capture some of the unobservable variation due to changing global norms.

The results, as shown in Table 3.2, support Norris's hypothesis. Despite the minor adjustments made to Norris's model, the estimate of the difference in democracy rating between countries with a PR system and those without is statistically significant. Countries with PR systems have, on average, democracy ratings .4 points higher than do countries without PR systems, all else equal. As Norris expected, the relationship between GDP and democracy is positive, as is the effect of a country being a former British colony. Also as expected,

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democracies seem to cluster with other democracies: an increase in the regional diffusion of democracy has a positive effect on a country's own level of democracy.

			Legislative	
	Democracy -		index of	
	Freedom		political	
	House/Polity (0-	Women in	competitiveness	Internal armed
	10)	parliament (%)	(1-7)	conflict (0-3)
PR electoral system for any house	0.445**	3.831***	0.254	0.189**
	(0.138)	(0.540)	(0.171)	(0.069)
Presidential republics (0/1)	1.510***	-0.203	0.144	-0.157*
	(0.208)	(0.783)	(0.218)	(0.063)
Mixed republics (0/1)	0.745***	-0.835	0.067	0.005
	(0.179)	(0.476)	(0.219)	(0.055)
Ruling monarchies (0/1)	-0.890	-3.469**	0.147	0.240
	(0.539)	(1.336)	(0.637)	(0.251)
Log GDP/capita (US\$)	0.803***	1.174***	0.285**	-0.083**
	(0.093)	(0.211)	(0.097)	(0.031)
Ex-British colony (0/1)	1.680***	-0.129	0.124	-0.123
	(0.234)	(0.514)	(0.187)	(0.078)
Middle East (0/1)	-1.305*	-3.603**	-0.529	0.255
	(0.526)	(1.110)	(0.412)	(0.304)
Regional diffusion of democracy	0.071***	0.135***	0.013*	-0.004*
	(0.006)	(0.037)	(0.006)	(0.002)
Ethnic fractionalization (0-100-pt scale)	-0.896*	0.958	-0.351	0.162
	(0.394)	(1.496)	(0.338)	(0.103)
Population size (thous)	-0.000	-0.000	0.000**	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Year (normalized to 1945)	-0.040***	0.511***	-0.004	-0.001
	(0.007)	(0.052)	(0.009)	(0.003)
Legislative election held this year (0/1)	0.075***	-0.816***	-0.073***	0.003
	(0.017)	(0.153)	(0.018)	(0.008)
Constant	-0.982	-31.700***	3.807***	0.941***
	(0.704)	(3.089)	(0.798)	(0.244)
P-statistic	0.000	0.000	0.000	0.000
Ν	2844	1023	2838	2759

Table 3.2: Effects of PR systems

Note: Panel-corrected standard errors using the Stata command -xtpcse-. Significant at * the 0.05 level, ** the 0.01 level, *** the 0.001 level.

The difference between countries with PR systems and those without is significant for the percentage of women in parliament. Countries with a PR system in any house have, on average, 4 percentage points more women in parliament than do those with no PR system, all else equal.

There does seem to be a positive effect due to time alone, as well. For the other three outcome variables, however, the data does not indicate a significant relationship with PR systems. This model does not suggest that countries with PR systems are any more or less politically competitive or conflict-prone than countries without PR systems. The coefficient estimate for the effect of PR systems on interstate conflict is statistically significant at the .05 level, but its magnitude is small relative to the scale.

A new model: Adding a PR system

The above analysis demonstrates that, with minor adjustments, Norris's model still generates statistically significant estimates for her outcome variable of interest. But it has little meaning for policy. Norris's model compares countries with PR systems to countries without PR systems. A more meaningful model would compare countries that added a PR system (within a certain time period) to those that did not add a PR system. This new variable is essentially a treatment variable: some countries added a PR system (either entirely PR or mixed) in place of a purely majoritarian system or no electoral system at all, and others did not, keeping their existing system. Negotiators, advisers, and academics considering adding a PR system to a country without one could then look to the average effects on countries that have made that switch previously.

Just as with the existence of PR systems, I test the balance of adding a PR system across several potential covariates. I compare the mean values of countries that added a PR system to those of countries that did not add a PR system. The data do not begin in all countries in the same year, so it is difficult to distinguish countries that have always had PR systems, but were not recorded in the data, from countries that had no electoral system at all and added a PR

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system. I therefore do not consider countries that always had PR systems separately. As Table 3.3 shows, some types of countries seem more likely to add PR systems than others. PR systems are more likely to have been added in presidential republics and less likely to have been added in mixed republics. PR systems are also more likely to have been added in wealthier countries; former British colonies; countries in regions that are highly democratic; and countries with large populations and physical area. They are less likely to have been added in the Middle East. Surprisingly, we see PR systems are less likely to have been added in countries with greater ethnic fractionalization (though the magnitude of this coefficient is small), suggesting that countries add PR systems for many reasons.

Table 3.3: Balance tests for countries that added a PR system in any house in any year						
	Mean difference					
	between countries that					
	added a PR system and					
	those that did not	T-statistic				
Presidential republics (0/1)	0.0827***	(4.55)				
Mixed republics (0/1)	-0.170***	(-8.13)				
Ruling monarchies (0/1)	-0.00651	(-0.63)				
Military states (0/1)	0.0165	(1.79)				
Log GDP/capita (US\$)	0.548***	(11.65)				
Ex-British colony (0/1)	0.125***	(9.92)				
Middle East (0/1)	-0.0338***	(-3.97)				
Regional diffusion of democracy	7.457***	(11.20)				
Ethnic fractionalization (0-100-pt scale)	-0.0530***	(-7.50)				
Population size (thous)	14289.0***	(5.15)				
Area size (sq mi)	318472.4***	(4.94)				
Year (normalized to 1945)	0	(0.00)				
Legislative election held this year (0/1)	0.0141	(0.89)				
Ν	13455					

Note: Significant at * the 0.05 level, ** the 0.01 level, *** the 0.001 level.

Data quality and measurement error

Up until this point I have accepted the reliability of the data and the social science

reasoning used by Norris and others. This section and the next make clear that this is no longer

possible.

According to the QOG Dataset, 23 countries have added PR systems since 1945. Sri

Lanka did so in 1979²⁴⁰, Taiwan in 1992²⁴¹, New Zealand in 1993²⁴², Ukraine in 1998²⁴³,

Lesotho²⁴⁴ and Rwanda²⁴⁵ in 2003, Mauritania²⁴⁶ in 2007, and Nepal in 2008²⁴⁷. However, there

are errors with the other 13 cases. The data indicates that Serbia and Montenegro had a PR

system in 1993 and did not have one in 1992. However, that country had its first elections under

a PR system in 1992.²⁴⁸ Unfortunately, this error is not consistent in any one direction. Tunisia

held and election under a PR system in the year before the change is indicated in the data²⁴⁹, as

did Sierra Leone²⁵⁰, Macedonia²⁵¹, Iraq²⁵², and Togo²⁵³; but Equatorial Guinea held an election

using PR in the year after the data suggests²⁵⁴ and Cameroon held one two years afterward.²⁵⁵

Bulgaria held an election using a PR system in the year before indicated in the data, but it

had used a mixed system to elect a constitutional assembly the year before that.²⁵⁶ The addition

of a PR system happened in different years than indicated, usually through a new constitution or

²⁴² Elections in New Zealand, "From FPP to MMP," http://www.elections.org.nz/voting/mmp/history-mmp.html

²⁴⁰ The Parliament of Sri Lanka, "The Electoral System," http://www.parliament.lk/about_us/electoral_system.jsp ²⁴¹ C. C. Chang and H. Tien, Taiwan's Electoral Politics and Democratic Transition: Riding the Third WaveM.E. Sharpe, 1996).

²⁴³ ACE, The Electoral Knowledge Network, "Representation of Women in Ukraine," http://aceproject.org/electoraladvice/archive/questions/replies/304278384

²⁴⁴ Wonbin Cho and Michael Bratton, Electoral Institutions, Partisan Status, and Political Support: A Natural Experiment from Lesotho, Afro Barometer, [2005]).

Elizabeth Powley, Rwanda: Women Hold Up Half the ParliamentInternational IDEA, (2005).

²⁴⁶ Raquel Ojeda, *Electoral Report: MAURITANIA/Presidential Elections* (Universidad Autónoma de Madrid: Election Watch, (2009).

²⁴⁷ See next chapter.

²⁴⁸ Slaviša Orlović, "Europeanization and Democratization of Parties and Party System of Serbia," Politics in *Central Europe* 3, no. 1 (2007), 92-104. ²⁴⁹ UNDP, "Programme on Governance in the Arab Region,"

http://www.pogar.org/countries/theme.aspx?t=3&cid=20

²⁵⁰U.S. Department of State, Bureau of African Affairs, "Background Note: Sierra Leone,"

http://www.state.gov/r/pa/ei/bgn/5475.htm

²⁵¹A. Bloed, European Centre for Minority Issues and T. E. A. Bozen/Bolzano, European Yearbook of Minority Issues, Volume 2 (2002/2003), (Brill Academic Publishers, 2004), 241.

²⁵² Kenneth Katzman, Iraq: Elections, Government, and ConstitutionCongressional Research Service, (2006).

²⁵³ I. Usa and U.S.A.I.B. Publications, *Togo Business Intelligence Report*, Intl Business Pubns USA (2009), 34. ²⁵⁴ "African Elections Database," http://africanelections.tripod.com/gn.html

²⁵⁵ IFES, "IFES Election Guide - Country Profile: Cameroon," http://www.electionguide.org/country.php?ID=38

²⁵⁶ S. Berglund, J. Ekman and F. H. Aarebrot, *The Handbook of Political Change in Eastern Europe*, (Edward Elgar, 2004), 446.

a referendum, for Morocco²⁵⁷, the Philippines²⁵⁸, Kazakhstan²⁵⁹, Kyrgyzstan²⁶⁰, and Mongolia²⁶¹, as well. In Djibouti, there has been no addition of a PR system.²⁶²

Some of these errors simply represent inconsistent coding; others are more egregious. Regardless of the issue, measurement error presents a challenge to our estimates. If we assume the error is classical in nature (not systematic), then our estimates will be biased toward zero. This means we are potentially underestimating the effect of adding a PR system. Future research could address the data issues (doing so would require not only checking all countries' electoral systems in all years, but all values for each of the outcome variables and covariates, as well). Were this done, we would have more confidence in the sign and magnitude of our estimated coefficients. Because this data is widely used, however, and policy recommendations are based on this data, the remainder of this chapter makes use of the data in its current state. Accepting the existing data, are the current recommendations reasonable?

²⁵⁷ European Institute for Research on Euro-Arab Cooperation, "MOROCCO, Electoral System," http://www.medea.be/en/countries/morocco/morocco-electoral-system/

²⁵⁸ Adriano Fermin, *Prospects and Scenarios for the Party List System in the Philippines* (Ateneo School of Government and Friedrich Ebert Stiftung, Philippine Office, 2001).

²⁵⁹ Kazakhstan Embassy, "Political System of Kazakhstan,"

http://www.kazakhstanembassy.be/DisplayPage.asp?pid=183

²⁶⁰ IFES, "IFES Election Guide - Election Profile for Kyrgyzstan,"

http://www.electionguide.org/election.php?ID=1376

 ²⁶¹ "Mongolia Passes New Election Law Ahead of 2012 Parliamentary Election," *Xinhua*, Dec. 15, 2011.
 ²⁶² Inter-Parliamentary Union, "DJIBOUTI, Assemblée Nationale (National Assembly),"
 http://www.ipu.org/parline-e/reports/2089 E.htm

	Year	Change	Issue
Sri Lanka	1979	Maj. to PR	
Bulgaria	1992	Single party to PR	Elections held in Nov. 1991 following Grand National
			Assembly elections in 1990, which used a mixed
			system
Taiwan	1992	Single party to mixed	
New Zealand	1993	Maj. to PR	
Serbia and Montenegro	1993	Single party to PR	Elections held in 1992
Equatorial Guinea	1994	Single party to PR	Elections held in 1995
Tunisia	1995	Single party to PR	Elections held in 1994
Sierra Leone	1997	Single party to PR	Elections held in 1996
Morocco	1998	Maj. to PR	Change took place in 2002
Philippines	1998	Single party to PR	Enacted in constitution in 1987 and enabling law in
			1995
Ukraine	1998	Maj. to mixed	
Lesotho	2003	Maj. to mixed	
Rwanda	2003	Appointed to mixed	
Macedonia	2003	Maj. to PR	Elections in Sept. 2002
Cameroon	2005	Maj. to mixed	Elections held in 2007
Iraq	2006	Single party to PR	Elections held in 2005
Djibouti	2007	Single party	No change
Mauritania	2007	Single party to mixed	
Kazakhstan	2008	Single party to PR	Constitution amended in 2007
Kyrgyzstan	2008	Single party to PR	Referendum in 2007
Nepal	2008	FPTP to mixed	
Тодо	2008	Single party to PR	Elections held in Oct. 2007
Mongolia	2009	Maj. to mixed	Reform passed in 2011 ahead of elections in 2012

Table 3.4: Countries that added a PR system in any house

Note: Mixed electoral systems include a proportional component as well as a majoritarian component and/or reserved seats or quotas. Countries identified by taking the first difference of the variable identifying the existence of a PR system at the country level.

Evaluating the new model: The endogeneity of adding a PR system

Before constructing additional models, though, a more fundamental assumption must be addressed: the endogeneity of electoral system change. As discussed in the first chapter, econometric analysis of electoral systems treats the choice of electoral system as exogenous; in fact the social science reasoning required to construct the model this way necessarily precedes the quantitative component. The need to make this determination, though, is not unique to the analysis of electoral systems. Determining causality is a challenge in any dataset that includes many time-varying variables, and sound policy recommendations rely on a correct determination. For example, Clerides, Lach, and Tybout study firms and ask whether those that export become more efficient because they export, or whether they export because they are more efficient than the firms that do not export.263 If it is the latter, then promoting exports is unlikely to cause an increase in efficiency (unless firms increase their efficiency in anticipation of being able to export). This is a critical distinction when making a policy recommendation.

The issue here is similar. Statistical tests cannot tell us the direction of causality between the addition of an electoral system and our outcome variables. But there is more than theory to guide this determination. In Figures 3.1-3.5, I graphically show which change occurs first. I first set the year that each country added a PR system to be year zero for that country. For the countries that did not add a PR system, I normalize the time variable at the mean of the value for the countries that did add a PR system. I then plot the mean value of each outcome variable against this new time variable.

Figure 3.1 shows that, on average, the democracy rating for countries that added a PR system was increasing long before those countries changed their electoral systems — there is no jump in average democracy rating after the change in electoral system. It also shows no marked change for countries that did not add a PR system. Figure 3.2 shows the same pattern for the average percentage of women in parliament. The change in electoral system does not seem to be causing the change in women's representation. (There are outliers far away from year zero in either direction in this and the other graphs because there are limited observations for those years; for example, only one country has data for 30 years after having added a PR system.) Figure 3.3 shows that the direction of causality between adding a PR system and the degree of legislative competitiveness is unclear, as well. New PR systems could encourage competitiveness, breaking down a single party's monopoly on power; or political parties in

²⁶³ Sofronis K. Clerides, Saul Lach and James R. Tybout, "Is Learning by Exporting Important? Micro-Dynamic Evidence from Colombia, Mexico, and Morocco," *The Quarterly Journal of Economics* 113, no. 3 (August 01, 1998), 903-947.

legislatures that are already becoming more competitive could add a PR system to lock in their gains, preventing a reversion to monopoly control. Lastly, Figure 3.4 shows that the incidence of internal armed conflict is relatively constant over time, for both countries that added a PR system and those that did not. (Again, the spike many years after the addition of a PR system is likely due to the limited number of observations; I do not assert that new PR systems re-start internal armed conflicts.)



Figure 3.1: Order of change — addition of PR system and democracy rating

Note: For countries that did not add a PR system, year is normalized to the mean year in which countries that did add a PR system did so.



Figure 3.2: Order of change — addition of PR system and women in parliament





Figure 3.3: Order of change — addition of PR system and legislative competitiveness

Note: For countries that did not add a PR system, year is normalized to the mean year in which countries that did add a PR system did so.



Figure 3.4: Order of change — addition of PR system and internal armed conflict

Note: For countries that did not add a PR system, year is normalized to the mean year in which countries that did add a PR system did so.

These graphs cast serious doubt on the existing models: the addition of a PR system does not cause change as much as it takes place alongside change. The existing data does not support the assumptions Norris, for one, makes. Indeed, combined with the concerns about measurement error, these graphs seem to call into question the reliability of the existing models and their estimates. But these issues can be addressed. Data can be improved, and, following the lead of the more qualitative analysis discussed in the first chapter, the scope of quantitative analysis can be narrowed to fewer cases or more precise dependent and independent variables. The remainder of this chapter is meant to encourage further research: though little can be said with certainty at present, the models presented may provide valuable support for policy recommendations in the future. Each section addresses a different statistical approach.

Difference-in-differences

One possible approach to analyzing panel data is difference-in-differences. With panel data, especially of the size and complexity of the cross-national data analyzed here, there are likely unobservable factors that are correlated with the outcome variable of interest: countries' values, historical memories, and cultures, which could all help explain their levels of democracy, cannot be easily quantified. The difference-in-differences approach lets us control for this covert bias in addition to the observable bias for which we already control in our model. This approach requires the parallel trends assumption, that the trend observed in the outcome variable for the countries that did not add a PR system is the same as the trend that would have applied for the countries that did add a PR system had they not done so. The graphs in the previous section suggest this is a reasonable assumption.

A second assumption is that all covert bias is time-invariant — that is, countries' cultures do not change over time. The graphs seem to rebut this assumption: something is changing that is not captured by the treatment variable (the indicator for a country having added a PR system in any house in any year) or any of the covariates. This could be addressed by identifying a strong instrument for the treatment variable. However, statistical tests failed to do so. The available data does not satisfactorily explain countries' decisions to add a PR system. Nevertheless, it is possible that with better data and a more finely tuned model this assumption could be satisfied, so it is worth exploring the potential uses of the difference-in-differences approach.

The coefficient estimates produced by a difference-in-differences model have different interpretations than those produced by simple OLS. Difference-in-differences estimates (using fixed effects) are within country. In this case, they tell us the difference between the average change in the outcome for the treatment group and the change for the control group. Table 3.5 shows that countries that added a PR system saw, on average, a .537 point increase, beyond that which would be expected had they not added a PR system, on the scale of legislative competitiveness. Notably, the difference-in-differences estimator for internal armed conflict is positive, indicating that countries that added a PR system experienced more internal armed conflict after their change in electoral system than they would have had they not changed systems. This result is likely caused by the endogeneity issues discussed previously. These estimates are only meant to be illustrative of the types of conclusions that could be drawn from more reliable data and a more clearly specified model.

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			Legislative	
	Democracy -		index of	
	Freedom		political	
	House/Polity (0-	Women in	competitiveness	Internal armed
	10)	parliament (%)	(1-7)	conflict (0-3)
Added a PR system this year or in a	0.244	0.683	0.537**	0.207**
previous year (0/1)	(0.194)	(1.134)	(0.183)	(0.078)
Presidential republics (0/1)	1.387***	5.214**	1.491***	-0.155***
	(0.109)	(1.876)	(0.109)	(0.044)
Mixed republics (0/1)	1.200***	2.130	1.993***	0.091*
	(0.106)	(1.617)	(0.107)	(0.043)
Log GDP/capita (US\$)	-0.156	0.614	-0.303***	-0.077*
	(0.083)	(0.921)	(0.091)	(0.034)
Regional diffusion of democracy	0.168***	-0.126*	0.081***	-0.006**
	(0.005)	(0.058)	(0.005)	(0.002)
Population size (thous)	-0.000***	-0.000	-0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Area size (sq mi)	0.000***	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Year (normalized to 1945)	0.001	0.405***	0.048***	0.009***
	(0.006)	(0.052)	(0.006)	(0.002)
Constant	-204.058***	-7.936	-78.413	1.922
	(51.202)	(322.865)	(49.869)	(21.975)
P-statistic	0.000	0.000	0.000	0.000
Ν	4772	1197	4140	4456

Table 3.5: Difference-in-differences effects of adding a PR system

Note: Fixed effects within country. Treatment variable is equal to 0 for all countries that did not add a PR system; equal to 0 for countries that did add a PR system for years prior to the change; and equal to 1 for countries that did add a PR system for years after the change. Additional covariates omitted due to collinearity. Significant at * the 0.05 level, ** the 0.01 level, *** the 0.001 level.

Serial correlation and heteroskedasticity

One of the assumptions needed to use OLS for panel data is that errors are serially uncorrelated (the Guass-Markov Theorem) and homoskedastic. Without these conditions, OLS is no longer the best linear unbiased estimator, and the estimates it produces are not valid for hypothesis testing.²⁶⁴ (This discussion applies to simple OLS models as well as to difference-in-differences.) Statistical tests can identify both of these issues. According to Wooldridge, though, serial correlation must be corrected before performing tests for heteroskedasticity, and serial correlation is usually a greater concern²⁶⁵; corrections for serial correlation in econometric packages generally correct for heteroskedasticity, as well.

I first use the Wooldridge test for serial correlation.²⁶⁶ Table 3.6 shows that for four of the five outcome variables, we can reject the hypothesis that there is no serial correlation. This means that countries' democracy ratings over time are, as would be expected, not independent of each other; the same is true for the percentage of women in parliament, the level of legislative competitiveness, and the incidence of internal armed conflict.

	Democracy - Freedom House/Polity (0- 10)	Women in parliament (%)	Legislative index of political competitiveness (1- 7)	Interstate armed conflict (0-3)	Internal armed conflict (0-3)
F-statistic	187.146	314.224	76.632	3.549	42.552
Prob > F	0.0000	0.0000	0.0000	0.0616	0.0000

Table 3.6: Tests f	for serial	correlation
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Note: Models use the addition of a PR system and the covariates from the previous models as dependent variables.

²⁶⁴ Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach* (Mason, Ohio: South-Western College Pub., 2003), 392-393.

²⁶⁵ Wooldridge, 414.

²⁶⁶ D. M. Drukker, "Testing for Serial Correlation in Linear Panel-Data Models," *Stata Journal* 3, no. 2 (2003), 168-177.

Models of electoral system change, then, need to correct for serial correlation (and likely heteroskedastic standard errors, as well). Hoechle recommends several potential approaches²⁶⁷, including the Newey-West transformation²⁶⁸, which requires an assumption about the length of time errors are likely to be correlated. Norris uses panel-corrected standard errors²⁶⁹, which requires an assumption about the type of serial correlation. There is no consensus among these approaches, according to Angrist and Pischke²⁷⁰; they advise simply clustering observations.²⁷¹ This is the approach followed for the remainder of this chapter.

Estimating the long-run multiplier

As discussed in the previous chapter, it is likely that the effects of changing a country's electoral system will only manifest over time, rather than immediately. In the simple OLS model, the coefficient is interpreted as the effect of the change, holding the year constant. In a finite distributed lag model, however, each year's effect can be isolated; the sum of all of the lagged coefficients represents the long-run multiplier, or the cumulative effect of the change over the time period covered by the lagged variables. Though the precision of each coefficient estimate is likely diluted due to serial correlation, Wooldridge finds that their sum can nevertheless be estimated well.²⁷²

Table 3.7 and Figure 3.5 illustrate the potential use of this type of model. I add lagged variables for each of the ten years following the addition of a PR system, as well as a forward lag

²⁶⁷ D. Hoechle, "Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence," *Stata Journal* 7, no. 3 (2007), 281-312(32).

 ²⁶⁸ Whitney K. Newey and Kenneth D. West, "A Simple, Positive Semi-Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix," *Econometrica* 55, no. 3 (May, 1987), pp. 703-708.
 ²⁶⁹ Norris. 85.

²⁷⁰ Joshua David Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics : An Empiricist's Companion* (Princeton: Princeton University Press, 2009), 318.

²⁷¹ Angrist and Pischke, 323.

²⁷² Wooldridge, 329.

for the year before the change, in case there are changes in the outcome variables in anticipation of a new electoral system. In addition to adding lagged variables for the addition of a PR system, I lag whether or not a parliamentary election was held. This lets us control for any effects of an election in each year independent of the electoral system used. Were this data to meet the conditions discussed earlier, and the change in electoral system to be exogenous, this model would suggest that only after several years do new PR systems lead to an increase in the percentage of women in parliament, and that the rate of increase is sustained for several years thereafter. This type of model would be meaningful for policy recommendations and analysis. Unfortunately, the existing data and theoretical models do not allow it.

Conclusion

Econometric analysis of country-level panel data is an attractive way to study institutional change. It holds the prospect of revealing the ceteris paribus effect of that change. However, the study of electoral system change does not at present meet the conditions necessary for this type of analysis. Measurement error can be corrected easily, if tediously. Endogeneity is the greater concern. As discussed in the first chapter, many scholars present electoral system change as a type of design, an exogenous choice. Were that the case, we could evaluate the change's average impacts, just as with other public policies or development programs. But it is not the case. The data suggest that we do not have a consistent explanation for why countries add PR system when they do. Learning how PR systems are created, and what effects of electoral system change, if any, we can expect, requires a case study approach. That is the subject of the next chapter.

Table 3.7: Lagged effects of adding a PR system

	Democracy - Freedom		Legislative index of political competitiveness	Interstate armed conflict	Internal armed conflict (0-
	House/Polity (0-10)	Women in parliament (%)	(1-7)	(0-3)	3)
New PR in 1 year	0.833	-1.492	-0.757	-0.041	0.201
	(0.605)	(2.141)	(0.460)	(0.047)	(0.359)
New PR electoral system for any house	0.349	2.104	0.297	-0.018	0.175
	(0.256)	(2.711)	(0.662)	(0.049)	(0.313)
New PR 1 year ago	0.865	0.291	0.619	-0.079	0.432
	(0.610)	(2.072)	(0.717)	(0.049)	(0.480)
New PR 2 years ago	0.956	1.535	0.671	-0.069	0.619
	(0.605)	(2.333)	(0.694)	(0.051)	(0.493)
New PR 3 years ago	0.667	2.414	0.705	-0.035	-0.165
	(0.577)	(2.375)	(0.701)	(0.041)	(0.118)
New PR 4 years ago	0.722	6.227***	0.599	-0.085	-0.132
	(0.679)	(1.683)	(0.684)	(0.045)	(0.135)
New PR 5 years ago	0.938	6.368***	0.522	-0.029	-0.147
	(0.811)	(1.608)	(0.697)	(0.048)	(0.113)
New PR 6 years ago	1.357	7.874***	0.840	-0.014	-0.224
	(1.084)	(1.816)	(0.676)	(0.036)	(0.185)
New PR 7 years ago	0.853	6.295***	0.389	-0.047	-0.146
	(0.555)	(1.465)	(0.337)	(0.043)	(0.257)
New PR 8 years ago	0.876	7.019***	0.296	-0.000	-0.212
	(0.533)	(1.762)	(0.295)	(0.033)	(0.255)
New PR 9 years ago	0.786	8.563***	0.118	0.020	-0.351
	(0.483)	(1.598)	(0.210)	(0.047)	(0.358)
New PR 10 years ago	0.470	3.475	0.004	-0.012	0.133
	(0.244)	(1.886)	(0.278)	(0.056)	(0.084)
Presidential republics (0/1)	2.038***	-2.125	1.421***	-0.103*	-0.277
	(0.517)	(2.056)	(0.412)	(0.041)	(0.154)
Mixed republics (0/1)	0.487	-3.168	0.488	-0.027	-0.025
	(0.613)	(1.909)	(0.418)	(0.027)	(0.117)
Log GDP/capita (US\$)	0.903**	2.058	0.095	-0.025	-0.129
	(0.287)	(1.169)	(0.158)	(0.015)	(0.082)
Ex-British colony (0/1)	1.030*	-1.839	0.397	0.031	-0.228
	(0.438)	(1.603)	(0.211)	(0.031)	(0.156)
Middle East (0/1)	-1.563	-7.148**	1.010*	0.066	0.509
	(1.002)	(2.644)	(0.453)	(0.046)	(0.373)
Regional diffusion of democracy	0.070**	0.042	0.036***	0.003*	-0.001

	(0.024)	(0.080)	(0.011)	(0.001)	(0.006)
Ethnic fractionalization (0-100-pt scale)	-1.925*	-1.613	-0.156	0.039	0.257
	(0.958)	(3.929)	(0.460)	(0.062)	(0.270)
Population size (thous)	0.000	-0.000	0.000	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Area size (sq mi)	-0.000	0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Year (normalized to 1945)	-0.018	0.390***	0.011	-0.003	-0.007
	(0.019)	(0.070)	(0.009)	(0.002)	(0.006)
Election held in 1 year	0.069	-0.585	0.221**	-0.034	0.059
	(0.121)	(0.383)	(0.071)	(0.030)	(0.058)
Legislative election held this year (0/1)	0.289	-1.061	0.321**	-0.031	0.048
	(0.193)	(0.676)	(0.099)	(0.049)	(0.073)
Election held 1 year ago	0.326	0.408	0.655***	-0.010	0.036
	(0.247)	(0.950)	(0.152)	(0.047)	(0.084)
Election held 2 years ago	0.386	-0.103	0.731***	-0.004	0.064
	(0.283)	(1.007)	(0.173)	(0.042)	(0.086)
Election held 3 years ago	0.413	-0.668	0.752***	0.054	0.054
	(0.277)	(1.103)	(0.184)	(0.057)	(0.080)
Election held 4 years ago	0.409	-0.729	0.720***	0.062	0.027
	(0.263)	(1.025)	(0.186)	(0.062)	(0.085)
Election held 5 years ago	0.384	-0.272	0.593***	0.077	-0.007
	(0.249)	(0.947)	(0.161)	(0.045)	(0.084)
Election held 6 years ago	0.449	-0.780	0.489***	0.023	-0.047
	(0.242)	(1.070)	(0.135)	(0.042)	(0.084)
Election held 7 years ago	0.404	-0.836	0.348**	0.055	-0.095
	(0.230)	(0.895)	(0.131)	(0.049)	(0.088)
Election held 8 years ago	0.293	-0.668	0.253*	-0.001	-0.108
	(0.201)	(0.775)	(0.119)	(0.049)	(0.080)
Election held 9 years ago	0.259	-0.735	0.079	-0.024	-0.085
	(0.148)	(0.666)	(0.101)	(0.038)	(0.068)
Election held 10 years ago	0.166	-0.714	0.142	0.023	-0.057
	(0.089)	(0.365)	(0.076)	(0.039)	(0.050)
Constant	-2.934	-22.462*	2.020	0.266*	1.758*
	(2.227)	(11.041)	(1.343)	(0.133)	(0.693)
P-statistic					
N	1322	632	1322	1279	1279
••	1012	002	1011		

Note: Panel-corrected standard errors, clustering at the country level. Significant at * the 0.05 level, ** the 0.01 level, *** the 0.001 level.



Note: Coefficients shaded in gray are significant at the .001 level.

4 NEPAL'S EVOLVING ELECTORAL SYSTEM

The previous chapters considered electoral systems in the aggregate. The key finding of this approach was that individual types of electoral systems, or changing between one type and another, are unlikely to have effects independent of other variables in the political or social system. In this chapter, I present a case study of the recent, as well as ongoing, negotiations in Nepal over that country's electoral system. Nepal was ruled by a constitutional monarchy, with a nominal parliament, until a civil war in the 1990s overthrew the king; an interim constitution was enacted, a combination legislature-constituent assembly was elected, and this body tried and failed to draft a new constitution. This chapter will proceed as follows: First, I will present the current status of negotiations; second, a review of the pre-civil war electoral system; third, a brief overview of the key actors and drivers of the conflict; fourth, the positions and interests of each party in the negotiations over the electoral system to be used for the elections to the constituent assembly; fifth, the implementation and outcomes of these elections; and finally, the positions and interests of each party in the current negotiations. Much of the data for this chapter was gathered through interviews with leaders of Nepali political parties and civil society groups. I also interviewed outside advisors working for foreign governments and international NGOs. (Many of these people also provided me with unpublished reports or personal communications.) Each person with whom I spoke has a preference for the design of Nepal's future electoral system. I do not. The purpose of this chapter is not to give a prescription for negotiators. Rather, the goal is to highlight how the case of Nepal casts doubt on the assumptions and illustrates the dynamics identified in the rest of this paper.

The current status of negotiations

On May 27, 2012, the Constituent Assembly (CA) of Nepal officially expired. Elected in 2008 and expected to complete their work on a new constitution within two years, CA members repeatedly renewed their own mandate until finally forbidden to do so by the Supreme Court. Political leaders, failing to agree on the core constitutional issues — whether to have a presidential or a parliamentary system, and on what basis to divide the country into federal units — instead agreed to hold fresh elections in November 2012.²⁷³ The electoral system will likely be part first-past-the-post and part proportional, as it was for the CA elections, but the ratio and relationship between the two formulas is yet to be decided. A year before the CA's dissolution, Khushee Tharu, of the International Institute for Democracy and Electoral Assistance (IDEA), said there was consensus on a 50-50 split between FPTP and PR.²⁷⁴ Six months prior to the expiration, according to one political leader, "Discussions are on to allocate 60 percent seats for the FPTP and 40 for the PR."²⁷⁵ However, 12 days before the expiration, news reports indicated agreement on a 55-45 split.²⁷⁶ But then five days before the expiration, to put an end to a nationwide strike by ethnic groups, the government promised the Indigenous Nationalities Joint Struggle Committee (NJSC) "a minimum of 60 percent proportional and 40 percent direct election."²⁷⁷ According to Kåre Vollan, who has advised the political leaders on electoral systems since the negotiations over the system used for the CA, on behalf of the Norwegian Foreign Ministry and international NGOs, "What will actually happen nobody knows. The hope is that the constitutional process will continue in one form or shape."²⁷⁸

 ²⁷³ Arjun Bhandari et al., "PM Announces Fresh CA Elections on Nov 22," *The Himalayan Times*, May 27, 2012.
 ²⁷⁴ Khushee Tharu, Interview with author, June 23, 2011.

²⁷⁵ "Parties Okay Mixed Electoral System," *The Kathmandu Post*, December 13, 2011.

²⁷⁶ "Finally, Deal on 11 States, Mixed Governance Model," *The Kathmandu Post*, May 15, 2012.

²⁷⁷ "Govt, Janajati Groups Sign 9-Pt Deal; Banda Called Off," *The Kathmandu Post*, May 22, 2012.

²⁷⁸ Kåre Vollan, E-mail, May 28, 2012.

Pre-2007 electoral system

As per the 1990 Constitution of Nepal, the country prior to the civil war had a parliament with 205 members in the lower house, elected by FPTP from 205 single-member constituencies. The constituencies did not have populations of equal size: each of the existing 75 administrative districts was given a representative, and districts with larger populations were given additional representatives; one of the five constituencies in Kathmandu had 102,632 voters, whereas a constituency in the Himalayas had but 6,249 voters.²⁷⁹ (There was also an upper house of parliament, in part elected by a single transferable vote method and in part appointed by the king.) Though the parliament's power was already nominal, the electoral system used to elect it further ensured this would be the case:

The King, closely associated with a particular religion and social structure, was described as the symbol of the Nepalese nation and the unity of the Nepalese people. [The constitution] thus established (or more accurately endorsed) the exclusionary nature of the state, oriented towards the majority religion, the majority language, and the majority culture. The 'first past the post electoral' system restricted the access to, and participation of minority, marginalized communities in institutions of the state. The hegemony of the high caste elite, in control of major political parties, was to be preserved by prohibition of sectarian and ethnic parties.²⁸⁰

Three elections were held under this system, in 1991, 1994, and 1999. In 1991, in conformance with Duverger's Law, the number of parties shrank dramatically — from 44 to 20 — in anticipation of the FPTP elections. As Ole Borre, Sushil R. Panday, and Chitra K. Tiwari write, "It was clearly in the interest of smaller parties, which stood no chance of winning a seat, to support neighbouring larger parties in return for gaining concessions. Furthermore, by withdrawing their candidates in most districts, and to have this favour returned by the larger parties in a few constituencies, even smaller parties were given the chance to have candidates in

²⁷⁹ Ole Borre, Sushil R. Panday and Chitra K. Tiwari, "The Nepalese Election of 1991," *Electoral Studies* 10, no. 4 (12, 1991), 359.

 ²⁸⁰ Yash Ghai, "Ethnic Identity, Participation and Social Justice: A Constitution for New Nepal?" *International Journal on Minority and Group Rights* 18, no. 3 (2011), 310.

the Parliament.²²⁸¹ The most well supported parties were expected to be the Nepali Congress party (NC), the Communist Party of Nepal (United Marxist-Leninist, UML), and two parties led by former prime ministers and thought to be loyal to the king.²⁸² However, in the elections, the NC and UML proved dominant; neither of the former prime ministers even won a seat in parliament, and their two parties got a combined four seats.²⁸³ The theories reviewed in previous chapters suggest that were there uncertainty prior to the election, the king would have favored a more proportional system to ensure some representation for his loyalists. However (as would happen in the CA elections), there was not uncertainty; rather, despite a lack of public opinion data, projections were made confidently and in error. Further, the king had no incentive to broaden inclusion in a parliament he knew to hold no true power.

The elections in the 1990s, in addition to reducing the number of parties, also excluded women and minority groups from political representation. The electoral law required that 5% of each party's nominees be women. And in 1991, the average was slightly better: out of 1,345 candidates, 80 were women. However, Borre, Panday, and Tiwari find, parties tended to nominate women in constituencies they expected to lose.²⁸⁴ The result was the election of just seven women to parliament, or 3% of the total²⁸⁵; that figure was repeated in the 1994 elections. Here Farrell's artificial measures conflicted with the overarching political system, muting the psychological effects of the electoral system. Beginning in 1997, though, the Local Governance Ordinance required 20% of seats in district-level legislatures to be held by women, leading to the election of over 3,900 women. While these local bodies may not have been active during the

²⁸¹ Borre, Panday and Tiwari, 360.

²⁸² Ibid.

²⁸³ Ibid., 361.

²⁸⁴ Ibid., 360.

²⁸⁵ Ibid., 361.

civil war²⁸⁶, NC leader Minendra Rijal credits the local quota with swelling the pool of qualified female candidates for the national parliament; the parliament elected in 1999 was 6% female.²⁸⁷ When another component of the political system was aligned with the electoral system, the effects were clearer.

In each of the three 1990s elections, just one Dalit (a member of the lowest caste) was elected.²⁸⁸ According to Krishna Khanal, a professor at Nepal's Tribhuvan University, the FPTP system used in these elections had the following shortcomings:

- it was not inclusive and under-representation of dalit, women and marginalized groups
- it was favourable for dominant groups, hill high castes Brahmin and Chhetri
- unbalance representation of political party: scored seats either more or less than the percentage of popular votes that parties obtained
- Discourage small parties
- It produced a weak and instable government²⁸⁹

But in the eyes of the king and the designers of the system, these were not shortcomings; they were desired outcomes. As discussed above, because of the system of government, a restrictive FPTP system was unnecessary. That the electoral system generated results favorable to the system's designers was both inevitable and meaningless. More significantly, Vollan said, there was "something fundamentally wrong with the political culture."²⁹⁰

Conflict: 1996-2007

Before presenting a brief chronology of the conflict, it is necessary to summarize the non-

political divisions in Nepal. Vollan is as succinct as can be:

 ²⁸⁶ The Constituent Assembly of Nepal: An Agenda for Women, International IDEA (2008), 12.
 ²⁸⁷ Minendra Rijal, Interview with author, June 24, 2011.

²⁸⁸ Kåre Vollan, "Alternative Quotas" (March 20, 2010), 2.

²⁸⁹ Krishna Khanal, "Choices of Electoral System for Nepal: Past Experiences and Alternatives" (Kathmandu, Nepal, 2009), 1. ²⁹⁰ Kåre Vollan, Interview with author, June 27, 2011.

The people of Nepal are divided along ethnic, caste, linguistic and religious lines in addition to in socio-economic strata that partly but not fully coincide with the groups listed here. Geographically the country is often divided in the mountain areas, the hills and the lower planes. The latter is the Terai on the border with India that is inhabited by the Madhesis; a common name of a large number of groups mainly defined by their linguistic and historical roots and Terai indigenous (Janajati) groups out of which the Tharus are dominant...The hills include the country's political and economical centre of the Kathmandu valley where the upper castes Bahuns and Chhetris constitute the elite...In the far west even the Bahuns and Chhetris are extremely poor. The main dimensions for the categorisation of people when discussing representation are caste, ethnicity and language. Religion is an additional dimension in some groups. Within the caste dimension the Dalits (the untouchables) are the undisputed excluded group based upon centuries of discrimination. Within the actual caste groups (non-Dalits) there is a clear difference between the hills and the Terai: in the hills the castes are dominated numerically by Bahuns and Chhetris who have dominated Nepal's political and economical life.²⁹¹

In early 1996, the Unified Communist Party of Nepal (Maoist), frustrated with the deadlock amongst the other political parties and King Birendra, and instigated by nationally coordinated police raids on leftist activists, abandoned the political process in favor of violent insurgency.²⁹² Maoist statements and demands were initially anti-imperialist, anti-monarchy, and anti-feudalism. "Their arguments assailing corruption and political deadlock resonated with many Nepalese, and their strong ideological stand was a stark contrast to the constant compromise of values that seemed rife within the parliamentary system."²⁹³ Following the massacre of much of the royal family, including the king, by the crown prince, the government entered into peace talks with the Maoists in the fall of 2001. The Maoists soon pulled out of the talks, though, and initiated attacks on army and police facilities, national infrastructure, and aid projects. In the spring of 2002, Prime Minister Deuba dissolved parliament and local legislatures. In the fall of that year, with the Maoists threatening a national strike, King Gyanendra dismissed

²⁹¹ Kåre Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," International Journal on Minority and Group Rights 18, no. 3 (2011), 345.

²⁹² For a detailed background, see Nepal Backgrounder: Ceasefire – Soft Landing or Strategic Pause?, International Crisis Group (April 10, 2003). ²⁹³ Ibid., 5.

Deuba and began negotiations with the Maoists for a ceasefire. The parties reached an agreement in January 2003, and the Maoists began negotiating with the other political parties over the end to the conflict. By August, the Maoists had resumed assassinating army leaders, and the ceasefire had collapsed, with little progress on the peace deal.²⁹⁴

Though the insurgency was initially ideological in nature, the Maoists increasingly exploited caste, class, and gender inequalities to gain support. As Yash Ghai writes, "By about 2000, formal links were established with dalits, janajatis and Madhesis, and various fronts were formed. Considerable emphasis was placed on a system of regional and ethnic autonomies and the right of cultural communities to keep or modify traditional religions and customs. By the time of negotiations with parliamentary parties on ceasefire and constitutional reform a few years later, the Maoist had developed a clear policy (on paper) on the 'national question' — and had attracted considerable support among the 'marginalized communities.'"²⁹⁵ Malcolm Langford and Ananda Mohan Bhattarai find this dimension of the insurgency to be tactical: "One stated aim of the Maoist armed insurgency was to address the social and economic injustices of all marginalised populations. Although, this broad emancipatory platform only emerged during the conflict as the Maoists sought alliances with caste-based, ethnic and women's groups."²⁹⁶ And Vollan agrees: "Some would explain the Maoist success on their ability to build their struggle on groups which had been left out of the Nepali society and decision making for centuries, whereas earlier class conflicts had made themselves dependent on the definition of proletariat that did not really exist."297

²⁹⁴ Nepal: Back to the Gun, International Crisis Group (October 22, 2003).

²⁹⁵ Ghai, 317.

²⁹⁶ Malcolm Langford and Ananda Mohan Bhattarai, "Constitutional Rights and Social Exclusion in Nepal," *International Journal on Minority and Group Rights* 18, no. 3 (2011), 388.

²⁹⁷ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 345.

In November 2005, the Maoists agreed to begin discussions with the Seven Party Alliance (SPA), which included the NC, UML, and other non-monarchist parties, to end the conflict.²⁹⁸ And in November 2006, a six-point agreement was signed. In addition to the future electoral system (discussed below), the agreement provided for the cantonment of the Maoist forces, and the monarchy was stripped of power.²⁹⁹

Negotiating the electoral system for the CA

Interest-based theories, reviewed in the first chapter, seem to fit best with the positions taken by the parties in negotiations over the electoral system in the six-point agreement and the interim constitution the following January. As Vollan writes, "Parties often tend to believe that the system which has worked for them in the past will do it again."³⁰⁰ So the NC, which had gotten over one-third of the vote and a majority of seats in the FPTP elections of the 1990s, favored a continuation of the FPTP system. (NC leaders also said FPTP would give voters a clearer connection to their representatives and minimize the power of party leaders.)³⁰¹ The Maoists, on the other hand, believed their support to be diffused throughout the country, rather than concentrated in any one area, and thus supported a fully proportional system with a single constituency³⁰² — "obviously for a tactical reason," according to Vollan.³⁰³ This belief was shared by the NC and UML; they assumed the Maoists were underground and did not have a strong organization.³⁰⁴ However, the NC worried that if the sentiments of marginalized groups

²⁹⁸ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 346.

²⁹⁹ *Six-Point Agreement*, (November 7, 2006): III. Relating to the subjects of the interim constitution.

³⁰⁰ Kåre Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections" (2010), 7.

³⁰¹ Rijal, Interview with author, June 24, 2011.

³⁰² Dinesh Tripathi, Interview with author, June 21, 2011.

³⁰³ Vollan, Interview with author.

³⁰⁴ Tripathi, Interview with author.

were not addressed, support for the Maoists would grow and violence could resume; the NC resigned itself to a PR component.³⁰⁵

Though NC leader Prakash Sharan Mahat said, "Everyone agreed on inclusiveness,"³⁰⁶ a proportional component can promote inclusiveness in two distinct ways. As Vollan writes, "Some understood it the common way as a list based system where parties would win seats according to their number of votes, but many, in particular from the NGOs, used it for a system where all groups of the society should be represented in accordance with their proportional strength in the population."³⁰⁷ Marginalized groups, such as the Madhesis³⁰⁸, cited the latter interpretation in their support for PR. That the parties supported the former interpretation is clear from their approach to quotas:

In the early discussions many politicians were of the opinion that the FPTP race would be won primarily by the traditional groups (such as Bahun, Chhetri, etc.) and therefore the list PR race could be used to offer affirmative action to marginalised groups. Within that logic, one would believe that the proportional representation of marginalised groups on the list race would translate into minimum requirements for such groups only, and not to exact quotas for all groups, including the Bahun and Chhetris who would not need affirmative action since they would anyway win a disproportional number of FPTP seats. However, when the draft law was submitted to the Parliament by the Election Commission (EC), the parties changed the quota rules from a minimum protection of marginalised groups to exact quotas for all groups, and with a 50 per cent requirement for both men and women on the lists.³⁰⁹

According to Vollan, party leaders agreed to quotas without thinking through their

implementation, assuming they would go unenforced as previous quotas for women had. They

also did not create a mechanism for determining any one candidate's ethnic group and hence

³⁰⁵ Rijal, Interview with author, June 24, 2011.

³⁰⁶ Prakash Sharan Mahat, Interview with author, June 15, 2011.

³⁰⁷ Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 2.

³⁰⁸ Ibid.

³⁰⁹ Vollan, Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal, 343-368, 347.

qualification for a quota.³¹⁰ Rather than a way to ensure proportionality or inclusiveness, a compromise on a mixed system was designed to "address the ego of both sides," in the words of Bhojraj Pokharel, who would lead the Election Commission during the CA elections.³¹¹

Though the NC had promoted FPTP as a way to reduce the parties' control over candidates, once a mixed system was agreed upon, all parties supported open lists, giving them more control, not less. Party leaders feared that were the order of lists set prior to elections, lower-ranked candidates would defect to other parties; better to keep them thinking they may just get a seat.³¹² As for the type of mixed system, the NC supported a parallel system without compensation, the UML supported a mixed-member proportional system that would compensate parties with additional seats if their showing in the FPTP races was not as strong as in the PR races, and the Maoists "were more ambivalent but very clear on the demand for two ballots with the possibility for voters to cast a split vote.³¹³

The size of parliament did not prove to be a major point of contention, illustrating the path dependence discussed in the first chapter. In negotiations over the FPTP-PR ratio, party leaders assumed FPTP would be used to elect about the same number of seats as in previous parliaments (with the addition of some seats in the Terai and Kathmandu Valley to account for the larger populations there). "We took the easiest way," Mahat said.³¹⁴

³¹⁰ Vollan, Interview with author

³¹¹ Bhojraj Pokharel, Interview with author, July 19, 2011.

³¹² Ibid.

³¹³ Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 2. ³¹⁴ Mahat, Interview with author.

The CA electoral system

The electoral system used for the CA elections in 2008 was sketched out in the six-point agreement and refined in the interim constitution and a supplementary election law. The six-point agreement called for 205 seats elected through FPTP, 204 elected through a "proportional representation system on the basis of votes won by the political parties," and 16 nominated by the Council of Ministers "from among distinguished persons."³¹⁵ (Unique among the parties, the UML entered a note of dissent saying a fully PR system would be "most democratic."³¹⁶)The parties also pledged to nominate candidates that would "ensure proportional representation of oppressed groups, region, Madheshi, Women, Dalit and other groups."³¹⁷

The interim constitution reflected the increasing pressure of the Maoists to increase the proportion of PR seats: 240 seats would be elected through FPTP from single-member constituencies ("as far as possible maintaining the same relationship between number of members and population for all the administrative districts"); 335 seats would be elected through PR, with one constituency for the entire country; and 26 nominated by the Council of Ministers "on the basis of consensus from among distinguished persons and persons from among ethnic and indigenous groups who fail to be represented as a result of elections under [FPTP or PR] who have made significant contributions to national life." Parties repeated their promise of inclusivity, and they made a firm commitment for the representation of women: "A minimum of one-third of the total number of candidates nominated shall be women."³¹⁸ In an amendment soon after the adoption of the interim constitution, parties added specificity to their inclusivity promise: "To enable Madhesi, Dalits, indigenous ethnic groups [Adivasi Janajati], women,

³¹⁵ Six-Point Agreement: III. Relating to the subjects of the interim constitution.

³¹⁶ Ibid.

³¹⁷ Ibid.

³¹⁸ *The Interim Constitution of Nepal, 2063, as Amended by the First, Second and Third Amendments* (2007): Article 63, Formation of the Constituent Assembly.

labourers, farmers, the physically impaired, disadvantaged classes and disadvantaged regions to participate in all organs of the State structure on the basis of proportional inclusion.³¹⁹

The interim constitution came into force in January 2007. Confusingly, the election law, certified in June of that year, called for a different FPTP-PR ratio: 240 seats under FPTP, 240 under PR, and 17 nominated by the Council of Ministers.³²⁰ The numbers in the interim constitution were eventually used for the CA elections. The election law did provide details beyond the general system required by the interim constitution. In the FPTP races, a candidate could run in up to two constituencies³²¹, but could not run both in an FPTP race and as part of a party list in the PR system.³²² The parties had agreed in February that it would be a parallel system, without compensation, and voters would each cast two ballots, one for their FPTP constituency and one that the entire country would get for the PR race.³²³ (Temporary voters — members of the army and police, as well as prisoners — were not assigned a constituency and therefore could not vote in an FPTP race.³²⁴) In the PR system, party lists were required to have at least 24 candidates, or 10% of the total number elected by PR.³²⁵ Though individual candidates (not affiliated with political parties) could stand for election in the FPTP races³²⁶, this requirement means individuals, or even very small parties, were excluded from the PR race.³²⁷

³¹⁹ *The Interim Constitution of Nepal, 2063, as Amended by the First, Second and Third Amendments*: Article 33, Responsibilities of the State, Second Amendment, June 13, 2007.

³²⁰ *Election to Members of the Constituent Assembly Act, 2064* (2007): Chapter 2, Election Constituency and Electoral System.

³²¹ Ibid.

³²² Ibid.

³²³ Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 1.

³²⁴ Pokharel, Interview with author

³²⁵ *Election to Members of the Constituent Assembly Act, 2064*: Chapter 2, Election Constituency and Electoral System.

³²⁶ Cecilia Bylesjö, Rumbidzai Kandawasvika-Nhundu and Stina Larserud, *Electoral System and Quotas in Nepal*, International IDEA (2010), 1.

³²⁷ Ibid., 2.

Modified Sainte-Laguë was selected as the electoral formula³²⁸, explained in a supplement to the law.³²⁹

The election law also required the parties to adhere to quotas for inclusivity. Compliance would be judged by the Election Commission, which could force the parties to revise their lists of candidates.³³⁰ Parties were required to have one-third of their candidates be women in the FPTP and PR systems combined.³³¹ No other quotas were set for the FPTP races. For the PR races, though, quotas would reflect the population as measured by the most recent census — in the case of the CA elections, 2001.³³² Table 4.1 shows the requirements:

		Percentage of candidates ³³³
Women		50%
Madhesi	Men	15.60%
	Women	15.60%
Dalit	Men	6.50%
	Women	6.50%
Oppressed tribes/indigenous tribes	Men	18.90%
	Women	18.90%
Backward region	Men	2%
	Women	2%
Others	Men	15.10%
	Women	15.10%

Table 4.1: Constituent Assembly quotas for PR lists

Note: "As a number of candidates represent more than one group, the sum total of the percentage of the candidates of all groups appears to be more than one hundred."³³⁴ "The category 'Backward region' refers to nine districts in Nepal: Achham, Kalikot, Jajarkot, Jumla, Dolpa, Bajhang, Bajura, Mugu and Humla. These areas were chosen as they are at the bottom of the development index among Nepal's 75 districts."³³⁵

³²⁸ Election to Members of the Constituent Assembly Act, 2064: Chapter 8, Counting of Votes and Election Results.

³²⁹ Election to Members of the Constituent Assembly Act, 2064: Schedule-5, Result Divisor Method.

³³⁰ Election to Members of the Constituent Assembly Act, 2064: Chapter 2, Election Constituency and Electoral System.

³³¹ Ibid.

³³² Ibid.

³³³ *Election to Members of the Constituent Assembly Act, 2064*: Schedule-1, Percentage of candidate for closed list of candidates.

³³⁴ Ibid.

³³⁵ Bylesjö, Kandawasvika-Nhundu, and Larserud, 3.

The quotas are exact quotas — both minimum and maximum. This means that the privileged groups, which would fall under the "Others" category, are guaranteed seats in the PR system even though they would be expected to perform well in the FPTP races.³³⁶ Another perverse implication is that women's parties would be required to field male candidates.³³⁷ Parties that fielded no more than 100 candidates were given an exemption from complying with the quotas; this would apply to ethnic parties and other marginalized groups.³³⁸ The quota for women was not included in the small party exemption.³³⁹ As discussed in the previous section, the PR lists were closed lists: the lists were ranked, and the seats allocated, after the votes were cast. Parties were still required to allocate seats in compliance with the quotas³⁴⁰, but they were given 10% leeway in either direction.³⁴¹

The implementation of CA electoral system

The elections for the CA took place on April 10, 2008. The change in electoral system from FPTP to a mixed system caused confusion for voters, political parties, and the Election Commission. Voters were given the FPTP ballot first; 5.2% of the ballots were marked invalidly. Then they were given the PR ballot; 3.7% were invalid, suggesting some voters initially thought they should mark the FPTP ballot twice without realizing there would be a second ballot.³⁴² Eleven large parties submitted lists for the PR race, meaning they had to comply with the quotas. This was not straightforward because, as noted above, the categories overlapped — a candidate

³³⁶ Ibid., 2-3.

³³⁷ Ibid., 3.

³³⁸ Ibid.

³³⁹ Ibid., 4.

³⁴⁰ Kåre Vollan, "A Comparison between Three Systems of Representation" (May 3, 2011), 2.

³⁴¹ Bylesjö, Kandawasvika-Nhundu, and Larserud, 5.

³⁴² Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 6.
could be both Madhesi and Dalit, for example.³⁴³ Party leaders had little understanding of the math³⁴⁴; Rijal, of the NC, advised many parties how to complete and submit their lists. The Election Commission reviewed parties' lists to ensure the quotas were met, but it did not independently investigate candidates' ethnicities, instead relying on the parties for that information.³⁴⁵ According to Vollan, this process was conducted in good faith.³⁴⁶ Once the ballots were cast, the highly technical electoral formula meant that the parties were dependent on the Election Commission for understanding and calculating the seat allocations.³⁴⁷ The large parties won 277 out of 335 seats.³⁴⁸

Table 4.2 shows the election outcomes in the PR and FPTP races, as well as the total seat allocation. Contrary to expectations that the Maoists lacked well-known candidates, the party won 50% of the FPTP seats. Leena Rikkila Tamang, the head of the International IDEA office in Nepal, said the Maoists "shocked themselves" with their success.³⁴⁹ Dinesh Tripathi, a lawyer who advises the parties, attributed the Maoists' performance to voters' fears that, if the Maoists were defeated, violence would resume.³⁵⁰ The NC and UML did worse in the FPTP races than in the nationwide PR race. Reflecting their geographical bases, the Madhesi People's Rights Forum and the Tarai Madhes Loktantrik Party performed better in the FPTP races.³⁵¹ Vollan computes the votes using several electoral formulas and finds that the formula used, the modified Sainte-

³⁴³ Ibid.

³⁴⁴ Minendra Rijal, Interview with author, July 12, 2011.

³⁴⁵ Pokharel, Interview with author.

³⁴⁶ Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 6.

³⁴⁷ Pokharel, Interview with author.

³⁴⁸ Ibid.

³⁴⁹ Leena Rikkila Tamang, Interview with author, June 16, 2011.

³⁵⁰ Tripathi, Interview with author.

³⁵¹ Vollan, "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections," 8.

Laguë, may have kept a few small parties from winning seats.³⁵² As in the 1990s elections, there was no pre-election uncertainty, which would have incentivized all parties to favor PR; they simply got it wrong.

	List PR			FPTP		Total		
	<u>Votes</u>	<u>Percent</u>	<u>Seats</u>	Percent	<u>Seats</u>	Percent	<u>Seats</u>	<u>Percent</u>
Communist Party of Nepal (Maoists)	3,144,204	30.0	100	29.9	120	50.0	220	38.3
Nepali Congress	2,269,883	21.7	73	21.8	37	15.4	110	19.1
Nepal Communist Party (UML)	2,183,370	20.9	70	20.9	33	13.8	103	17.9
Madhesi People's Rights Forum, Nepal (MJF)	678,327	6.5	22	6.6	30	12.5	52	9.0
Tarai Madhes Loktantrik Party	338,930	3.2	11	3.3	9	3.8	20	3.5
Rastriya Prajatantra Party	263,431	2.5	8	2.4		0.0	8	1.4
Communist Party of Nepal (Marxist-Leninist)	243,545	2.3	8	2.4		0.0	8	1.4
Sadbhavana Party	167,517	1.6	5	1.5	4	1.7	9	1.6
Janamorcha Nepal	164,381	1.6	5	1.5	2	0.8	7	1.2
Communist Party of Nepal (United)	154,968	1.5	5	1.5		0.0	5	0.9
Rastriya Prajatantra Party Nepal	110,519	1.1	4	1.2		0.0	4	0.7
Rastriya Janamorcha	106,224	1.0	3	0.9	1	0.4	4	0.7
Rastriya Janashakti Party	102,147	1.0	3	0.9		0.0	3	0.5
Other parties/independents winning seats	544,184	5.2	18	5.4	4	1.7	22	3.8
Total for parties winning seats	10,471,630	100.0	335	100.0	240	100.0	575	100.0

Table 4.2: 2008 Constituent Assembly election results³⁵³

Table 4.3 shows how fully each of the three major parties complied with the quotas when they allocated seats following the election. Though each party's candidate list met the quota

³⁵² Ibid. ³⁵³ Ibid., 7-8.

requirements, they generally failed to comply when filling seats, except for the quotas for women and others (the privileged groups, as discussed above).

Table 4.3: Constituent Assembly quota compliance ³⁵⁴					
Quota provision (%)	UCPN-M	NC	CPN-UML		
Madhesis (31.2)	29	28.77	30		
Dalits (13)	14	12.33	12.85		
Janajatis (37.8)	30	36.99	34.28		
Backward region (4)	4	2.74	2.86		
Women (50)	50	49	50		
Others (30.2)	30	32.88	30		

Table 4.4 shows the results of the quota system for the FPTP and PR races. Just over 9% of the FPTP candidates were women, and 12.5% of FPTP races, or 30 seats, were won by women. Of the Maoists' 43 female candidates, 24 won seats; 2 of the NC's 26 female candidates 2 won; no UML female candidates won seats³⁵⁵, and no party's only winning candidate was a woman.³⁵⁶ Bylesjö, Kandawasvika-Nhundu, and Larserud find that the high success rate by female Maoist candidates was due to the party's strategy of running women in easier races. "Notable is that a majority of the female candidates won with very large margins."³⁵⁷ In the PR election, 161 women won seats; a further six were nominated by the Council of Ministers.³⁵⁸

³⁵⁴ Bylesjö, Kandawasvika-Nhundu, and Larserud, 3.

³⁵⁵ Ibid., 5.

³⁵⁶ The Constituent Assembly of Nepal: An Agenda for Women, 8.

³⁵⁷ Bylesjö, Kandawasvika-Nhundu, and Larserud, 5.

³⁵⁸ Ibid.

type				
				PR
	FPTP	PR	Total	quota
	percent	percent	percent	percent
Women	12.5	48.1	33.2	50.0
Madhesis	30.8	36.1	33.9	31.2
Dalits	2.9	13.1	8.9	13.0
Janajatis	32.1	35.2	33.9	37.8
Backward	5.0	3.0	3.8	4.0
region				
Others	41.7	28.1	33.4	30.2

Table 4.4: Quotas and outcomes by electoral system	n
tvne ³⁵⁹	

Though the quotas were not met exactly, the total representation approximated the PR quotas for all groups but women. However, it is not clear the quotas improved inclusivity as much as the number suggest. As Vollan writes:

It is not all the groups within the broad categories of Madhesis and Janajatis which have been excluded from political life in the past or actually needed special measures during the 2008 elections. Many such groups were already adequately represented or even overrepresented earlier and the wide definition of groups did not help the genuinely underprivileged to win seats.³⁶⁰

Further, the inability of the Election Commission to verify the ethnicity of candidates, the general difficulty of categorizing groups³⁶¹, and the increasing prevalence of intermarriages³⁶² meant that parties had broad discretion when filling seats from their PR lists.

One result was the numerically insufficient representation of marginalized groups. But another result was ineffective representation. According to Mohan Acharya, the senior legal officer of the United Nations Development Programme's constitution assistance effort in Nepal, the goal of the CA election was to elect experts who would be qualified to write a constitution,

³⁵⁹ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 353.

³⁶⁰ Bylesjö, Kandawasvika-Nhundu, and Larserud, Interview with Krishna Hachhethu, 9.

³⁶¹ Ibid.

³⁶² Ibid., 14.

but instead the representatives were party hacks.³⁶³ Vollan said all parties allocated PR seats to those loyal to party leaders³⁶⁴; he and others call these CA members the "creamy layer" of marginalized groups.³⁶⁵ (Interestingly, he also said the parties acted in good faith.³⁶⁶)Tripathi said this includes donors, friends, and family members of leaders, and that few of those elected by PR are widely known by voters.³⁶⁷

Though there is no legal difference between those elected by FPTP and those by PR, the CA members elected by FPTP came to see themselves as a higher tier of representatives. This could be explained by their assumption that those elected by PR were party hacks, by their grievance at the cost and effort it took to campaign for a FPTP seat³⁶⁸, or by their clear identification with a constituency of voters.³⁶⁹ Mahat, himself elected through FPTP, said he and others look down on those elected by PR, and that constituents look to the directly elected members for representation.³⁷⁰ This sentiment was echoed by UML leader Pradeep Gyawali.³⁷¹ And it is felt by the marginalized groups. Mark Wallem, the head of the National Democratic Institute (NDI) office, said women have held few positions of power in the CA. "Who challenges these men at the top?" he asked.³⁷² This reduces women's autonomy from the parties that chose them.³⁷³ Ang Kaji Sherpa, the general secretary of the Nepal Federation of Indigenous Nationalities (NEFIN), said the PR representatives' loyalities to the parties mean they do not

³⁶³ Mohan Acharya, Interview with author, June 3, 2011.

³⁶⁴ Vollan, Interview with author.

³⁶⁵ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 348.

³⁶⁶ Vollan, Interview with author.

³⁶⁷ Tripathi, Interview with author.

³⁶⁸ Jill Cottrell, Constituent Assembly Procedures from a Gender Perspective, International IDEA (2008), 12.

³⁶⁹ Bylesjö, Kandawasvika-Nhundu, and Larserud, Interview with Krishna Hachhethu, 23-24.

³⁷⁰ Mahat, Interview with author.

³⁷¹ Pradeep Gyawali, Interview with author, June 29, 2011.

³⁷² Mark Wallem and Ram Guragain, Interview with author, July 18, 2011.

³⁷³ The Constituent Assembly of Nepal: An Agenda for Women, 8.

represent indigenous communities.³⁷⁴ Gajadhar Sunar, the president at Dalit NGO Federation, said the same is true for his group — the PR representatives rely on party leaders for nominations, appointments, and campaign funding, and there is a feeling of superiority by the high-caste party leaders, as well.³⁷⁵ Again, just as in the 1990s, the overarching political culture, in Vollan's words, precluded the electoral system's psychological effects.

Echoing the concerns of the centripitalist camp described in the first chapter, Vollan concludes that the quotas used for the CA elections, rather than promoting inclusivity and reconciliation, entrenched ethnicity as a dividing line in Nepal.³⁷⁶ Ghai's disagreement is vehement:

Those who say that affirmative action creates disharmony among communities (a frequent assertion in Nepal) are those who sit on the top of the heap; and seem to be unaware of the resentment that is generated by present inequalities. Those who say that affirmative action intensifies caste or ethnic distinctions are the very people who in the past have imposed disabilities on the basis of these distinctions, and still have a vested interest in their perpetuation. Caste and ethnic identities have been intensified in many countries without reservations, perhaps because of the lack of reservations.³⁷⁷

Ghai's arguent is in line with the findings of the previous chapter: the causality between electoral system and societal outcomes is ambiguous.

Negotiating Nepal's future electoral system

The ongoing negotiations over the electoral system to be used in future elections (perhaps elections to re-form the CA, perhaps not until the election following the completion of the constitution) are dominated by the top leadership of the political parties. In 2009 the Carter

³⁷⁴ Ang Kaji Sherpa, Interview with author, June 28, 2011.

³⁷⁵ Gajadhar Sunar, Interview with author, June 29, 2011.

³⁷⁶ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 362. ³⁷⁷ Ghai, 326.

Center conducted interviews throughout the country and found almost no public participation in the constitutional process, "be it through CA outreach efforts, NGO activities, political party activities, protest programs, or other events."³⁷⁸ Local representatives of the major parties said they learned of their own parties' positions only through the media.³⁷⁹ Even mid-level national party leaders have little influence; there is no intra-party democracy.³⁸⁰ Pampha Bhusal, at the time a member of the Maoist politburo (and the radical wing which has since split off to form the Communist Party of Nepal, Maoist³⁸¹), said she was not authorized to discuss the possibility of compromise. Just the top leader or clique of leaders from each party has the final say, she said.³⁸² This is of particular concern to mid-level female leaders and others concerned with women's representation and quotas for women, as none of the top leaders are women.³⁸³

International experts and advisors, working for governments, international organizations, and NGOs, have been involved in the constitutional process. But their influence has not been determinative. Bhusal said these outside actors are "not productive" and do not have much influence because the parties are so powerful and "everything's politicized."³⁸⁴ Khimlal Devkota, another Maoist leader, said the parties did benefit from advice on technical matters, but that, during negotiations, outside advice was not appropriate.³⁸⁵ Mahat, of the NC, said that, other than on technical information and training for less experienced CA members, outside actors have

³⁷⁸ Nepalis Want New Constitution to Promote Decentralization and Equality (Kathmandu, Nepal: The Carter Center (2010), 5.

³⁷⁹ Ibid., 16.

³⁸⁰ Tripathi, Interview with author.

³⁸¹ Tika Pradhan, "UCPN-M Splits, CPN, Maoist Born," *The Himalayan Times*, June 19, 2012.

³⁸² Pampha Bhusal, Interview with author, June 20, 2011.

³⁸³ Cottrell, 15.

³⁸⁴ Bhusal, Interview with author.

³⁸⁵ Khimlal Devkota, Interview with author, June 20, 2011.

had "basically no impact." "We don't want to be influenced," he said. "This is our problem."³⁸⁶ Tamang, of International IDEA, said NGOs understand this.³⁸⁷

Because of the level of detail of many of the constitutional issues, including the electoral system, the CA was divided into several committees tasked with producing concept papers in alignment with the principles dictated by the top party leaders.³⁸⁸ The committee that addressed the electoral system was the Committee on Determination of Forms of Governance of the State. No proposal for the form of government was able to garner the support of a majority of this committee's members. Instead, the committee issued three separate concept papers. Just the electoral system components of the concept papers will be considered here. A review by International IDEA concluded, "Proposed electoral systems are of different types and are not easy to understand in a way they are drafted…No suitable model has been prescribed.³⁸⁹

The Maoist proposal garnered 18 votes out of 39 members on the committee, with 20 votes against.³⁹⁰ Of the three concept papers, it offered the least detail on the electoral system:

Election of Federal Legislature: (1) The members of federal legislature shall be elected by Multimember proportional direct election, as prescribed by the law. (2) Members pursuant to sub Article (1), one or more than one members may be elected from a single constituency, (3) Candidacy should be given for the members pursuant to sub Article (1) on the basis of proportional inclusion. (4) The number of seats for the members pursuant to sub Article (1) should be determined on the basis of the population, geography and social economic specialties. (5) Voters have to caste their votes on the basis of numbers of the candidates.³⁹¹

The Maoists provided slightly more detail in a draft constitution issued by the party during

negotiations:

³⁸⁶ Mahat, Interview with author.

³⁸⁷ Tamang, Interview with author.

³⁸⁸ Tharu, Interview with author.

³⁸⁹ Commentary Notes on the Concept Papers and Preliminary Drafts of the Thematic Committees of the Constituent Assembly of Nepal, International IDEA and Nepal Law Society (2010), 59.

³⁹⁰ Ibid., 58.

³⁹¹ Committee on Determination of Forms of Governance of the State, *The Preliminary Draft of the Constitution and the Explanatory Note*, Constituent Assembly (2009), 9. Election of Federal/Central Legislature, 43.

(4) The Federal House of Peoples' Representatives shall be constituted by direct elections, insuring all inclusive and fully proportional representation under the multimember electoral system. Procedures, regarding the delimitation of the constituencies and representation, shall be as determined by law. (5) Proper representation of oppressed the communities such as poor peasant, Dalits, Muslims, who have been residing in a scatter way but having a huge population of workers, shall be guaranteed in the Federal House of Peoples' Representatives. (6) In the case of cast/ethnicity and communities, who do not have required minimum population for the constitution of the Federal House of Peoples' Representatives, and in the case of the specialists and professional groups there shall be nomination as determined by the Schedule in a specified number. (7) The total numbers of the representatives in the Federal House of Peoples' Representatives shall be 245.³⁹²

In the Maoist proposal, each province would be subdivided by ethnic group. Consider a province that is one-third Madhesi, one-third Dalit, one-third Janajati, and 50% female. Say this province's population would qualify it for six seats in parliament. Then six separate FPTP elections would be held: in one, all the candidates would be Madhesi men; in another, Madhesi women, and so on. But now assume that each of the three groups has just under one-third representation, with the remainder split between several smaller groups. It is not clear that these other groups would get an election of their own. On one hand, this could encourage the dissolution of ethnicity as a diving line between groups, as these smaller groups would have to vote for candidates from other groups. However, it would prevent people from the smaller groups from ever holding elective office. People from the larger groups would never have to cross over and vote for the smaller groups.³⁹³ Gyawali, of the UML, said this would permanently divide society.³⁹⁴

In interviews in 2010 with Vollan about their proposed system, Maoist leaders said their goal was to achieve inclusivity through a single system, avoiding the two tiers of representatives

³⁹² Unified Communist Party of Nepal (Maoist), *Constitution of the People's Federal Republic of Nepal*, 2067 (*Proposed Integrated Draft*) (2010), 113. The Federal House of Peoples' Representatives, 46.

³⁹³ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 360.

³⁹⁴ Gyawali, Interview with author.

seen in the CA. But they conceded their proposal was complicated and seemed willing to use PR instead.³⁹⁵ In my interviews with them, the Maoists were similarly ambiguous. I asked them how they explained their shift from favoring PR in the CA elections to favoring direct elections now (aside from the obvious reason that they performed so well in the CA FPTP races). Bhusal said the goal of the CA elections was to produce a representative body to draft a representative constitution — she called it "my constitution." When that constitution finally comes into being, she said, any legislature it produces, including through direct elections, would have to act in accordance with principles and rules generated by a representative process.³⁹⁶ Devkota said the same thing: The CA election was not a regular election. The Maoist proposal would promote inclusivity so well, he said, that an upper house of parliament would be unnecessary to balance the results of the FPTP elections.³⁹⁷ (The Maoists may also fear that the CA election was unique in another way: voters' disenchantment with the other parties was intense and they feared a resumption of violence³⁹⁸, which seems unlikely now to international observers³⁹⁹, Gyawali of the UML⁴⁰⁰, and Jitendra Dev of the Madhesi People's Rights Forum-Democratic.⁴⁰¹) At the same time, though, the Maoists saw their proposed electoral system as one component of a larger effort to increase stability in government, and that the form of government — presidential or parliamentary — would have to be decided first.⁴⁰² They said parliamentary systems in general often result in hung parliaments, as there is little experience with party alliances⁴⁰³, and that

³⁹⁵ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 361.

³⁹⁶ Bhusal, Interview with author.

³⁹⁷ Devkota, Interview with author.

³⁹⁸ Tripathi, Interview with author.

³⁹⁹ Tharu, Interview with author.

⁴⁰⁰ Gyawali, Interview with author.

⁴⁰¹ Jitendra Dev, Interview with author, July 1, 2011.

⁴⁰² Devkota, Interview with author.

⁴⁰³ Ibid.

federalism decentralizes power. In Bhusal's words, the Maoists want "one power point."⁴⁰⁴

Vollan attributed this to "old Leninist thinking," where other parties were expected to follow the Maoists' lead.⁴⁰⁵ Devkota said the top leadership was rethinking the proposed electoral system (it could result in hung parliaments, too, he said), and that the issue needed negotiation.⁴⁰⁶ Both were of the opinion that the Maoists would win a presidential election.

The proposal by the NC and UML received 16 votes in favor and 21 against⁴⁰⁷:

(1) The members of the lower house of federal legislature shall be elected on the basis of Mixed member proportional representation system as prescribed by the law. (2) fifty percent of the members pursuant to sub Article (1) shall be elected through first past the post system ensuring the candidacy on the basis of the principle of proportional inclusion from Women, Indigenous/caste, Dalits, Madhesi and other groups and community. . (3) Fifty percent of the members pursuant to sub Article (1) shall be elected through proportional representation race on the basis of list incorporating women Dalits, Madhesi, Indigenous and other class and community, on the basis of the votes obtained by the political parties considering the whole country as a single constituency. Provided that the political party elected through the proportional representation system has to obtain minimum 3 percent of total vote casted. (4) Members pursuant to sub Article (3) shall be elected to compensate inappropriate ratio caused from the result of election pursuant to sub Article (2). Election of Upper House of Federal Legislature: Sixty five members of the upper house of federal legislature shall be elected according to the election system as follows, as prescribed by the law. a. Forty five members from each provincial legislature representing in equal number. b. Fifteen members elected from the electoral college comprising the chief of local governments as one from each provinces. c. Through the election pursuant to sub Article (a) and (b, Proportional inclusive representation of Women, Dalit, Madhesi, Indigenous and other groups and communities shall be ensured. . d. Five members nominated by the President on recommendation of the Prime Minister from the experts, minorities, marginalized, and declining community contributing in the various sector of social life.⁴⁰⁸

⁴⁰⁴ Bhusal, Interview with author.

⁴⁰⁵ Vollan, Interview with author,

⁴⁰⁶ Devkota, Interview with author.

⁴⁰⁷ Commentary Notes on the Concept Papers and Preliminary Drafts of the Thematic Committees of the Constituent Assembly of Nepal, 58.

⁴⁰⁸ Committee on Determination of Forms of Governance of the State, *The Preliminary Draft of the Constitution and the Explanatory Note*, 9. Election of Federal/Central Legislature, 43-44.

This proposal would replicate the CA electoral system, but change the FPTP-PR ratio to 50-50 (76 seats in the lower chamber by FPTP, 75 by PR).⁴⁰⁹ Mahat, of the NC, said a parliament of this size — a maximum of 225 members — would be less costly and provide equally inclusive representation. ⁴¹⁰ Rijal, also of the NC, said even smaller would be preferable.⁴¹¹ And Pokharel, formerly of the Election Commission, said a small parliament would allow for adequate representation because there would also be provincial legislatures, unlike in the past.⁴¹²

That the NC and UML would support a 50-50 ratio seems to go against their apparent strategic interests. Leaders from these parties shared the perception that the Maoists remained the strongest party, and the NC and UML fared poorly in the FPTP races for the CA, so why would they reduce the share of PR seats? The reasons they give are more normative than interest-based. According to UML leader Kalpana Rana, the FPTP component "gives a platform to demonstrate individual abilities and charisma which would have been otherwise overshadowed by the party if it had been fully proportional electoral mode," and the PR component ensures inclusivity.⁴¹³ Gyawali, of the UML, said FPTP promotes accountability and attachment to the community.⁴¹⁴ Further, they are concerned that Maoists' real goal, with totalitarianism a practical impossibility, is absolute power through democracy.⁴¹⁵ Tamang, of International IDEA, said the Maoists saw accepting democratic competition as a short-term tactic. "Of course they want power," she

⁴⁰⁹ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 360.

⁴¹⁰ Mahat, Interview with author.

⁴¹¹ Rijal, Interview with author, June 24, 2011.

⁴¹² Bhojraj Pokharel, Upper House Represents the National Diversity, International IDEA (April 2011), 9.

⁴¹³ Kalpana Rana, *Constitution Drafting does Not seem to be Easy Unless the Political Parties Agree in Principle*, International IDEA (April 2011), 14.

⁴¹⁴ Gyawali, Interview with author.

⁴¹⁵ Rijal, Interview with author, June 24, 2011.

said.⁴¹⁶ The system should bind the Maoists, Mahat said. "By their faith they are not democratic."⁴¹⁷

However, the NC and UML proposal is not without interest-based components. It would make the PR race provide compensation to parties that did not perform as strongly in the FPTP races.⁴¹⁸ Rijal said this was promoted by the UML because it typically receives disproportionately fewer seats than votes.⁴¹⁹ (Incidentally, it is also promoted by Vollan.⁴²⁰) And it would replicate the CA quota system, including the broad categories for marginalized groups⁴²¹, even though Mahat acknowledged that some groups covered by the quotas, such as Newars and Madhesi Brahmins, already have access to state structures.⁴²² The exact quotas for privileged groups works in favor of the NC and UML. Gyawali, of the UML, said he favored keeping closed lists for the PR race. He said open lists were impractical because widespread illiteracy necessitates using party symbols, rather than candidate names, on ballots.⁴²³ Tamang said the same concern would apply to any ranked choice voting method.⁴²⁴ Sherpa, of NEFIN, suggested the NC has not abandoned FPTP altogether because its supporters in the Indian government want "a single voice to deal with."⁴²⁵ Why the NC would comply, knowing that single voice is likely to be the Maoists' is unclear. Finally, the NC and UML may support retaining FPTP because they feel, like the Maoists, that the threat of violence suppressed the true

⁴¹⁶ Tamang, Interview with author.

⁴¹⁷ Mahat, Interview with author.

⁴¹⁸ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 359.

⁴¹⁹ Rijal, Interview with author, June 24, 2011.

⁴²⁰ Vollan, A Comparison between Three Systems of Representation.

⁴²¹ Vollan, "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal," 360.

⁴²² Mahat, Interview with author.

⁴²³ Gyawali, Interview with author.

⁴²⁴ Tamang, Interview with author.

⁴²⁵ Sherpa, Interview with author.

level of support for the NC and UML in the CA election. But Tamang was skeptical: the NC did not want to acknowledge objectives facts, she said. Its leaders are "prisoners of the past."⁴²⁶

The third proposal, put forward by the Madhesi parties, got 3 votes in favor and 31 against⁴²⁷:

The members of lower house of Federal legislature shall be elected through first past the post system, by ensuring candidacy on the basis of the principle of proportional inclusive from women, Indigenous/caste, Dalits, Madhesi and other groups communities, as determined by the law. The members of upper house of federal legislature shall be elected through proportional representation, as determined by the law. Provided that, the political party elected through the proportional representation system should have to obtain minimum 3 percent of total votes casted as prescribed by the law. (2) The members pursuant to sub Article (1) shall be elected on the basis of total votes casted in the election of lower house obtained by the political party, as prescribed by the law.⁴²⁸

As this proposal did not gain traction with the other parties, the Madhesi parties knew they would have to settle for what the major parties decided. Dev, a Madhesi leader, said he supported a fully proportional lower house, but that he would accept a 50-50 split between FPTP and PR, as in the NC and UML proposal. He also said the PR side should use lists with set candidate orders so leaders could not manipulate seat allocations.⁴²⁹ Just like the other parties, though, the Madhesis saw the electoral system as one component in a larger approach. Their goal: shift power away from the center and toward the local level, where they are dominant in some areas of the country. Tamang said the Madhesi support for PR reflects the perception that FPTP races cost more, and are therefore more dependent on funding from national parties, so PR would allow local interests more ability to determine policy priorities.⁴³⁰ Ethnic-based federalism is

⁴²⁶ Tamang, Interview with author.

⁴²⁷ Commentary Notes on the Concept Papers and Preliminary Drafts of the Thematic Committees of the Constituent Assembly of Nepal, 58. ⁴²⁸ Committee on Determination of Forms of Governance of the State, *The Preliminary Draft of the Constitution and*

the Explanatory Note, 9. Election of Federal/Central Legislature, 44-45.

⁴²⁹ Dev, Interview with author.

⁴³⁰ Tamang, Interview with author.

favored for the same reason: to curtail dominance by the privileged ethnic groups and castes in the center.⁴³¹

This cohesive approach is made clear by the contention, on behalf of Madhesi, indigenous, and Dalit groups, that inclusivity does not simply mean proportionality; rather, it entails redress for past abuses. Understood this way, the electoral system, as well as quotas for positions in the civil service or military, is not intended to exactly reflect the current population. Over-representation, which would give these groups significant power⁴³², is seen as a means to end discrimination.⁴³³ As the Carter Center report found:

Beyond the demand for autonomous states, representatives of some ethnic-based groups speak of the need for "special" rights to be granted within such states for members of indigenous communities.⁴³⁴...Representatives of the Tamsaling Joint Struggle Committee stressed that, although the group is calling for a state that recognizes Tamang identity, all caste and ethnic groups would have equal opportunities. However, the demand for special rights seems to inherently imply that measures would be put in place for the benefit of one or multiple constituencies.⁴³⁵

Sunar, of the Dalit NGO Federation, said that Dalits were 16% of the population in the 1991 census, 13% in 2001, and that due to their high birthrate, they would be "not less than" 20% now (only the preliminary results of the 2011 census have been released). He said Dalits should therefore be allotted 20% of the civil service and the lower house of parliament; that the electoral system should be fully proportional; and that if a mixed system were in place, the FPTP races should include Dalit-only constituencies that would rotate throughout the country's

⁴³¹ Andreas Follesdal, *Federalism, Ethnicity and Human Rights in Nepal, Or: Althusius Meets Acharya*, Dalit Welfare Organization (2009), 2.

⁴³² Ibid., 5.

⁴³³ Nepalis Want New Constitution to Promote Decentralization and Equality, 6.

⁴³⁴ Ibid., 12.

⁴³⁵ Ibid., 15.

districts. Even if the most recent census found 13% Dalits again, Sunar said, he would not be satisfied: 13% is "not adequate compensation for 3,000 years of discrimination." 436

Though this reasoning did not permeate the work of the CA's committee on the form of government, it was addressed in the concept paper issued by the Committee to Decide the Basis of Cultural and Social Solidarity: "The State shall adopt the policy of positive discrimination for the mainstreaming of the groups, communities or class who were socially excluded because of the differences in social and cultural norms and values."437 And it appears in the Maoists' draft constitution:

Provided that, nothing shall be deemed to prevent the making of special provisions by law for the protection, empowerment or advancement of women, dalits, indigenous ethnic tribes (adiwasis janjatis), Madhesis or farmers, workers, oppressed region, Muslims, backward class, minority, marginalized and endangered communities or destitute people, youths, children, senior citizens, gender or sexual minorities, disabled or those who are physically or mentally incapacitated and helpless people, who are economically, socially or culturally backward.⁴³⁸

Sherpa, of NEFIN, conceded that the census would be used for quotas in a similar fashion to the

CA elections (they could be phased out as groups' status improved), but he said in addition each

of the 65 indigenous groups should be guaranteed at least one representative each.⁴³⁹

Settling these issues is made more difficult by the political parties' continuous — and

continually changing — promises to marginalized groups to end strikes, as mentioned in this

chapter's section on the current status of negotiations. Prior to the CA elections, the government

issued three letters to indigenous groups. To NEFIN, the parties promised:

⁴³⁶ Sunar, Interview with author.

⁴³⁷ Committee to Decide the Basis of Cultural and Social Solidarity, The Preliminary Draft of the Constitution and the Explanatory Note, Constituent Assembly (2009), Special provisions for the protection, development, inclusion, and mainstreaming of language and culture; economic development and equality, timely reform in law and social security, 7.

⁴³⁸ Unified Communist Party of Nepal (Maoist), Constitution of the People's Federal Republic of Nepal, 2067 (*Proposed Integrated Draft*), 24. Right to Equality, 11. ⁴³⁹ Sherpa, Interview with author.

1. Political parties, in their first past the post candidate list for the CA elections, will field indigenous peoples in a proportional way. 2. While preparing the proportional list (different from the FPTP), all of the parties participating in the election need to make sure that all of the listed indigenous peoples are represented in the CA. 3. The eight political parties in the current government will find a constitutional or a legal way to make sure that at least one representative is appointed to the CA in the event that there remain unrepresented indigenous communities.440

To the Tamang community:

18. The government recognizes the marginalization and discrimination of Tamangs by the state and affirms its commitment to uplift the status of the Tamang people. The government recognizes the important contribution played by the Tamang people in the⁴⁴¹

And to the National Alliance for Republic and Federalism:

1. The government recognizes the contribution of the Limbuwan, Khumbuwan, Tamsaling, Tharuhat, Dalits, and others in the Andolan...4. Indigenous/ethnic, indigenous Terai inhabitants, Dalits, backward classes, Muslims, women and others will be integrated into the state organs/government on a proportional basis.⁴⁴²

And yet none of these promises were fulfilled. Rijal, of the NC, said that offers and expectations

of over-representation are merely political posturing, and that there is no other option than using

the numbers from the census.⁴⁴³

Conclusion

The lesson from this review of Nepal's recent experience is that the electoral system is

but one component of a much larger system, a system in which each actor has different goals and

priorities. Participants in the process said the electoral system is of lower concern than the form

⁴⁴⁰ Ram Chandra Paudel, Agreement 1: Between Nepal Government and NEFIN, United Indigenous Struggle Committee representatives, August 7, 2007.

⁴⁴¹ Janardan Sharm Prabkhakar, Agreement 2: Between Nepal Government and Tamang representatives, August 7, 2007.

⁴⁴² Ram Chandra Paudel, Agreement 3: Between Nepal Government and National Alliance for Republic and Federalism representatives, August 7, 2007. ⁴⁴³ Rijal, Interview with author, July 12, 2011.

of government⁴⁴⁴ or federal structure.⁴⁴⁵ Expecting clear outcomes from choices made on the electoral system, then, is unrealistic. Vollan, himself an advisor on these issues, said in a political culture where inter-party alliances are a rarity at best, the electoral system would be unlikely to lead to internal reform of the parties. Even logical improvements, he said, may be opposed by parties just because they are different from the current system. Worse still, Vollan predicted that unlike in the CA elections, where the parties showed good faith, for future elections they would learn how to manipulate the electoral system, complaining about definitions of ethnic groups and exploiting the quota exemption for small parties.⁴⁴⁶ When Wallem, of NDI, predicted the outcome of the next election (NC: "total failures"; UML: "rudderless") the electoral system that would be used was simply not a factor.⁴⁴⁷ The creation of Nepal's future electoral system is generally seen as a second-tier, technical matter.

⁴⁴⁴ Pokharel, Upper House Represents the National Diversity, 9.

⁴⁴⁵ Pokharel, Interview with author.

⁴⁴⁶ Vollan, Interview with author.

⁴⁴⁷ Wallem and Guragain, Interview with author.

5 CONCLUSION

In this paper I have argued that there is a contradiction between the optimistic theories of the transformative power of electoral systems and the dearth of evidence supporting their independent effects. Scholarship on electoral systems tends to conclude with a set of recommendations for constitution-drafters or lawmakers, or for those advising them. Given the research in this paper, though, recommendations that are largely normative would be disingenuous. Instead, I offer practitioners a few cautionary suggestions:

- 1. The electoral system is not the only answer, or even one possible answer; it is one part of a much bigger answer. Just because electoral system change is endogenous does not mean no effort should be directed toward it. Depending on the context, an electoral system can work in harmony with or opposition to the rest of the political system, or it can be entirely incidental. What an electoral system is unlikely to be is the dominant mechanism that changes society. The investment in electoral system reform should be consonant with its value in relation to other potential interventions.
- 2. Expertise in electoral systems is no substitute for a needs analysis for each new context. As the first chapter shows, there are a lot of people who have spent a lot of time studying electoral systems. Even if advisors and organizations recognize the difficulties described in this paper, electoral systems may be their sole expertise, and they want to help. I implore these outside actors: If electoral system reform is not a critical need in a given country, allow local actors the space and freedom to address issues of greater significance.

3. Engagement with academia is beneficial to both scholars and practitioners.

Scholarship that relies solely on theory or large-n datasets risks being meaningless to actual policy implementation. Academics need insights that practitioners can provide: accounts of negotiations, field reports of changing societal attitudes. If academics understand how the electoral system fits into the dynamics of a given context, their research will improve. And if practitioners are honest in their assessments, their future peers — today's students — will be better prepared for the issue's complexities.

The topic of this paper was instigated by studies in conflict resolution. Electoral system reform was presented as a systemic approach to conflict, as contrasted with individual- or group-level interventions. Just change the laws, and the conflict will end. So it is dispiriting, even if not surprising, that there is no quick fix. Still, this paper should provide some positive impetus to the field of electoral systems. It is a field that should be studied rigorously and put into practice with humility.

APPENDIX 1 SYSTEM DYNAMICS MODEL



*******new variables*******

gen presidential=1 if no_ce==2 replace presidential=0 if no_ce==1 replace presidential=0 if no_ce==3 replace presidential=0 if no_ce==4 replace presidential=0 if no_ce==5

gen mixedexecutive=1 if no_ce==3 replace mixedexecutive=0 if no_ce==1 replace mixedexecutive=0 if no_ce==2 replace mixedexecutive=0 if no_ce==4 replace mixedexecutive=0 if no_ce==5

gen monarchy=no_rm

gen military=no_ms

gen loggdpcapita = $ln(gle_gdp)$

gen britishcolony=1 if ht_colonial==5 replace britishcolony=0 if ht_colonial==0 replace britishcolony=0 if ht_colonial==1 replace britishcolony=0 if ht_colonial==2 replace britishcolony=0 if ht_colonial==3 replace britishcolony=0 if ht_colonial==4 replace britishcolony=0 if ht_colonial==6 replace britishcolony=0 if ht_colonial==7 replace britishcolony=0 if ht_colonial==8 replace britishcolony=0 if ht_colonial==9 replace britishcolony=0 if ht_colonial==10

gen middleeast=1 if ht_region==3 replace middleeast=0 if ht_region==1 replace middleeast=0 if ht_region==2 replace middleeast=0 if ht_region==4 replace middleeast=0 if ht_region==5 replace middleeast=0 if ht_region==6 replace middleeast=0 if ht_region==7 replace middleeast=0 if ht_region==8 replace middleeast=0 if ht_region==9 replace middleeast=0 if ht_region==10

by ccode: gen normalyear=year-1945 tsset ccode normalyear

sort ht_region normalyear gen regionaldiffusiontotal=fh_ipolity2 + p_democ + van_index + chga_demo by ht_region normalyear: egen regionaldiffusion=mean(regionaldiffusiontotal)

gen ethnicfractionalization=al_ethnic

gen popinthousands=pwt_pop

gen area=wdi_area

labmask ccode, values(cname) label variable presidential "Presidential republics (0/1)" label variable mixedexecutive "Mixed republics (0/1)" label variable monarchy "Ruling monarchies (0/1)" label variable military "Military states (0/1)" label variable loggdpcapita "Log GDP/capita (US\$)" label variable britishcolony "Ex-British colony (0/1)" label variable middleeast "Middle East (0/1)" label variable middleeast "Middle East (0/1)" label variable regional diffusion of democracy" label variable regional diffusion "Ethnic fractionalization (0-100-pt scale)" label variable popinthousands "Population size (thou)" label variable area "Area size (sq mi)" label variable normalyear "Year (normalized at 1945)" label variable dpi_legelec "Legislative election held this year (0/1)"

label variable fh_ipolity2 "Democracy - Freedom House/Polity (0-10)" label variable wdi_wip "Women in parliament (%)" label variable dpi_lipc "Legislative index of political competitiveness (1-7)" label variable ucdp_type2 "Interstate armed conflict (0-3)" label variable ucdp_type3 "Internal armed conflict (0-3)"

sort ccode normalyear by ccode: gen majorpr=1 if dpi_pr==0 by ccode: replace majorpr=1 if dpi_pr==1 by ccode (normalyear), sort: gen byte first = sum(majorpr == 1) == 1 & sum(majorpr[_n - 1] == 1) == 0 by ccode: gen yearfirstspread=normalyear*first egen ccodeyearfirstspread=max(yearfirstspread), by(ccode) by ccode: gen firsttime=normalyear-ccodeyearfirstspread

sort ccode firsttime by ccode: replace dpi_pr=dpi_pr[_n-1] if dpi_pr>=. & firsttime>=0

gen anypr=1 if dpi_pr==1 replace anypr=0 if dpi_pr==0

label variable anypr "PR electoral system for any house (0/1)"

sort ccode normalyear by ccode: gen addpr=d1.anypr if firsttime>0 replace addpr=0 if addpr==-1

label variable addpr "New PR electoral system for any house this year (0/1)"

sort ccode normalyear by ccode: egen treat=total(addpr)

label variable treat "New PR electoral system at any time by country (0/1)"

sort ccode normalyear by ccode: gen yearaddpr=normalyear*addpr if treat==1 egen yearnonaddpr=mean(yearaddpr) if yearaddpr>0

egen ccodeyearaddpr=max(yearaddpr), by(ccode) by ccode: gen newtime=normalyear-ccodeyearaddpr if treat==1 by ccode: replace newtime=normalyear-yearnonaddpr if treat~=1 by ccode: replace newtime=round(newtime)

label variable newtime "Year normalized to addition of PR system"

gen ddtime=1 if newtime>0 replace ddtime=0 if newtime<=0

gen prepost=1 if ddtime==1 & treat==1 replace prepost=0 if ddtime==1 & treat==0 replace prepost=0 if ddtime==0

label variable prepost "Added a PR system this year or in a previous year (0/1)"

by ccode: gen addpr_f1=f.addpr by ccode: gen addpr_11=1.addpr by ccode: gen addpr_12=12.addpr by ccode: gen addpr_13=13.addpr by ccode: gen addpr_14=14.addpr by ccode: gen addpr_15=15.addpr by ccode: gen addpr_16=16.addpr by ccode: gen addpr_17=17.addpr by ccode: gen addpr_18=18.addpr by ccode: gen addpr_19=19.addpr by ccode: gen addpr_110=110.addpr

label variable addpr_f1 "New PR 1 year from now" label variable addpr_f1 "New PR 1 year ago" label variable addpr_f2 "New PR 2 years ago" label variable addpr_f3 "New PR 3 years ago" label variable addpr_f4 "New PR 4 years ago" label variable addpr_f5 "New PR 5 years ago" label variable addpr_f6 "New PR 6 years ago" label variable addpr_f1 "New PR 7 years ago" label variable addpr_f1 "New PR 7 years ago" label variable addpr_f1 "New PR 8 years ago" label variable addpr_f1 "New PR 9 years ago" label variable addpr_f1 "New PR 9 years ago"

by ccode: gen dpi_legelec_f1=f.dpi_legelec by ccode: gen dpi_legelec_l1=l.dpi_legelec by ccode: gen dpi_legelec_l2=l2.dpi_legelec by ccode: gen dpi_legelec_l3=l3.dpi_legelec by ccode: gen dpi_legelec_l4=l4.dpi_legelec by ccode: gen dpi_legelec_l5=l5.dpi_legelec by ccode: gen dpi_legelec_l6=l6.dpi_legelec by ccode: gen dpi_legelec_l8=l8.dpi_legelec by ccode: gen dpi_legelec_l9=l9.dpi_legelec by ccode: gen dpi_legelec_l10=l10.dpi_legelec

label variable dpi_legelec_f1 "Election held 1 year from now" label variable dpi_legelec_l1 "Election held 1 year ago" label variable dpi_legelec_12 "Election held 2 years ago" label variable dpi_legelec_13 "Election held 3 years ago" label variable dpi_legelec_14 "Election held 4 years ago" label variable dpi_legelec_15 "Election held 5 years ago" label variable dpi_legelec_16 "Election held 6 years ago" label variable dpi_legelec_17 "Election held 7 years ago" label variable dpi_legelec_18 "Election held 8 years ago" label variable dpi_legelec_19 "Election held 9 years ago" label variable dpi_legelec_10 "Election held 9 years ago"

by ccode: gen ucdp_type2_col=1 if ucdp_type2==1 replace ucdp_type2_col=1 if ucdp_type2==2 replace ucdp_type2_col=1 if ucdp_type2==3 replace ucdp_type2_col=0 if ucdp_type2==0

by ccode: gen no_ucdp_type2=1 if ucdp_type2_col==0 replace no_ucdp_type2=0 if ucdp_type2_col==1 by ccode: gen end_ucdp_type2=d1.no_ucdp_type2 replace end_ucdp_type2=0 if end_ucdp_type2==-1

by ccode: gen ucdp_type3_col=1 if ucdp_type3==1 replace ucdp_type3_col=1 if ucdp_type3==2 replace ucdp_type3_col=1 if ucdp_type3==3 replace ucdp_type3_col=0 if ucdp_type3==0

by ccode: gen no_ucdp_type3=1 if ucdp_type3_col==0 replace no_ucdp_type3=0 if ucdp_type3_col==1 by ccode: gen end_ucdp_type3=d1.no_ucdp_type3 replace end_ucdp_type3=0 if end_ucdp_type3==-1

label variable end_ucdp_type2 "End of interstate war (0/1)" label variable end_ucdp_type3 "End of internal war (0/1)"

sort treat newtime

by treat newtime: egen meandemocracy=mean(fh_ipolity2) by treat newtime: egen meanwomen=mean(wdi_wip) by treat newtime: egen meancompetitiveness=mean(dpi_lipc) by treat newtime: egen meaninterstate=mean(ucdp_type2) by treat newtime: egen meaninternal=mean(ucdp_type3)

label variable meandemocracy "Mean democracy rating for countries that added a PR system" label variable meanwomen "Mean % of women in parliament for countries that added a PR system" label variable meancompetitiveness "Mean legislative competitiveness rating for countries that added a PR system" label variable meaninterstate "Mean interstate armed conflict for countries that added a PR system" label variable meaninternal "Mean internal armed conflict rating for countries that added a PR system"

sort ccode normalyear by ccode: gen ucdp_type2_l1=l.ucdp_type2 by ccode: gen ucdp_type3_l1=l.ucdp_type3

label variable ucdp_type2_l1 "Interstate armed conflict (0-3) 1 year ago" label variable ucdp_type3_l1 "Internal armed conflict (0-3) 1 year ago"

sort ccode normalyear by ccode: gen end_ucdp_type2_l1=l.end_ucdp_type2 by ccode: gen end_ucdp_type2_l2=l2.end_ucdp_type2 by ccode: gen end_ucdp_type2_13=13.end_ucdp_type2 by ccode: gen end_ucdp_type2_14=14.end_ucdp_type2 by ccode: gen end_ucdp_type2_15=15.end_ucdp_type2

by ccode: gen end_ucdp_type3_11=1.end_ucdp_type3 by ccode: gen end_ucdp_type3_12=12.end_ucdp_type3 by ccode: gen end_ucdp_type3_13=13.end_ucdp_type3 by ccode: gen end_ucdp_type3_14=14.end_ucdp_type3 by ccode: gen end_ucdp_type3_15=15.end_ucdp_type3

global controls_anypr="presidential mixedexecutive monarchy loggdpcapita britishcolony middleeast regionaldiffusion ethnicfractionalization popinthousands normalyear dpi_legelec"; global controls_addpr="presidential mixedexecutive loggdpcapita britishcolony middleeast regionaldiffusion ethnicfractionalization popinthousands area normalyear"; global addprlags="addpr_11 addpr_12 addpr_13 addpr_14 addpr_15 addpr_16 addpr_17 addpr_18 addpr_19 addpr_110"; global dpi_legelec_lags="dpi_legelec_f1 dpi_legelec dpi_legelec_f1 dpi_legelec_f2 dpi_legelec_f3 dpi_legelec_f3 dpi_legelec_f3 dpi_legelec_f3 dpi_legelec_f4 dpi_legelec_f5 dpi_legel

*************balance tests********

estpost ttest presidential mixed executive monarchy military loggdpcapita britishcolony middleeast regional diffusion ethnic fractionalization popinthousands area normalyear dpi_legelec, by(anypr) esttab ., wide

estpost ttest presidential mixed executive monarchy military loggdpcapita britishcolony middleeast regional diffusion ethnic fractionalization popinthousands area normalyear dpi_legelec, by(treat) esttab ., wide

tsset ccode normalyear

eststo clear

xtpcse fh_ipolity2 anypr \${controls_anypr}, correlation(psar1) pairwise
eststo democracy

xtpcse wdi_wip anypr \${controls_anypr}, correlation(psar1) pairwise eststo women

xtpcse dpi_lipc anypr \${controls_anypr}, correlation(psar1) pairwise
eststo competitiveness

xtpcse ucdp_type3 anypr \${controls_anypr}, correlation(psar1) pairwise eststo internal

estout *, cells(b(star fmt(%9.3f)) se(par)) stats(p N, fmt(%9.3f %9.0g)) legend label collabels(none) varlabels(_cons Constant)

*******change in electoral system******

tab ccode yearaddpr if yearaddpr>0

```
*************endogeneity**********
```

tsset ccode newtime

xtline fh_ipolity if treat==1, overlay xtline wdi_wip if treat==1, overlay xtline dpi_lipc if treat==1, overlay xtline ucdp_type2 if treat==1, overlay xtline ucdp_type3 if treat==1, overlay

twoway(scatter meandemocracy newtime if treat==1, legend(lab(1 "Democracy - Freedom House/Polity (0-10)"))) (scatter meanwomen newtime if treat==1, legend(lab(2 "Women in parliament (%)"))) (scatter meancompetitiveness newtime if treat==1, legend(lab(3 "Legislative index of political competitiveness (1-7)"))) (scatter meaninterstate newtime if treat==1, legend(lab(4 "Interstate armed conflict (0-3)"))) (scatter meaninternal newtime if treat==1, legend(lab(5 "Internal armed conflict (0-3)")))

twoway(lfit meandemocracy newtime if treat==1, legend(lab(1 "Fitted line: Democracy - Freedom House/Polity (0-10)"))) (lfit meanwomen newtime if treat==1, legend(lab(2 "Fitted line: Women in parliament (%)"))) (lfit meancompetitiveness newtime if treat==1, legend(lab(3 "Fitted line: Legislative index of political competitiveness (1-7)"))) (lfit meaninterstate newtime if treat==1, legend(lab(4 "Fitted line: Interstate armed conflict (0-3)"))) (lfit meaninternal newtime if treat==1, legend(lab(5 "Fitted line: Internal armed conflict (0-3)")))

twoway(scatter meandemocracy newtime if treat==1, legend(lab(1 "Mean democracy rating for countries that added a PR system")) xline(0)) (scatter meandemocracy newtime if treat~=1, legend(lab(2 "Mean democracy rating for countries that did not add a PR system")))

twoway(scatter meanwomen newtime if treat==1, legend(lab(1 "Mean % of women in parliament for countries that added a PR system")) xline(0)) (scatter meanwomen newtime if treat~=1, legend(lab(2 "Mean % of women in parliament for countries that did not add a PR system")))

twoway(scatter meancompetitiveness newtime if treat==1, legend(lab(1 "Mean legislative competitiveness rating for countries that added a PR system")) xline(0)) (scatter meancompetitiveness newtime if treat~=1, legend(lab(2 "Mean legislative competitiveness rating for countries that did not add a PR system")))

twoway(scatter meaninterstate newtime if treat==1, legend(lab(1 "Mean interstate armed conflict for countries that added a PR system")) xline(0)) (scatter meaninterstate newtime if treat~=1, legend(lab(2 "Mean interstate armed conflict for countries that did not add a PR system")))

twoway(scatter meaninternal newtime if treat==1, legend(lab(1 "Mean internal armed conflict rating for countries that added a PR system")) xline(0)) (scatter meaninternal newtime if treat~=1, legend(lab(2 "Mean internal armed conflict rating for countries that did not add a PR system")))

tsset ccode normalyear

eststo clear

xtreg fh_ipolity2 prepost \${controls_addpr}, fe
eststo dd_democracy

xtreg wdi_wip prepost \${controls_addpr}, fe
eststo dd_women

xtreg dpi_lipc prepost \${controls_addpr}, fe
eststo dd_competitiveness

xtreg ucdp_type3 prepost \${controls_addpr}, fe
eststo dd_internal

estout *, cells(b(star fmt(%9.3f)) se(par)) stats(p N, fmt(%9.3f %9.0g)) legend label collabels(none) varlabels(_cons Constant)

***********auto-correlation**********

xtset ccode normalyear xtserial fh_ipolity2 addpr \${controls_addpr} xtserial wdi_wip addpr \${controls_addpr} xtserial dpi_lipc addpr \${controls_addpr} xtserial ucdp_type3 addpr \${controls_addpr}

********heteroskedasticity*********

xtset ccode normalyear xtgls fh_ipolity2 addpr \${controls_addpr}, igls panels(heteroskedastic) estimates store hetero xtgls fh_ipolity2 addpr \${controls_addpr} local df=e(N_g)-1

lrtest hetero . , df(`df')

********** correcting approaches**********

tsset ccode normalyear

eststo clear

xtpcse wdi_wip addpr \${controls_addpr}, correlation(psar1) pairwise eststo pcse

xtreg wdi_wip addpr \${controls_addpr}, cluster(ccode)
eststo cluster

newey2 wdi_wip addpr \${controls_addpr}, lag(5) force
eststo newey

estout *, cells(b(star fmt(%9.3f)) se(par)) stats(p N, fmt(%9.3f %9.0g)) legend label collabels(none) varlabels(_cons Constant)

***********lagged change in electoral system********

tsset ccode normalyear

eststo clear

xtreg fh_ipolity2 addpr_f1 addpr \${addprlags} \${controls_addpr} \${dpi_legelec_lags}, cluster(ccode)
eststo democracy

xtreg wdi_wip addpr_f1 addpr \${addprlags} \${controls_addpr} \${dpi_legelec_lags}, cluster(ccode) eststo women

xtreg dpi_lipc addpr_f1 addpr \${addprlags} \${controls_addpr} \${dpi_legelec_lags}, cluster(ccode)
eststo competitiveness

xtreg ucdp_type3 addpr_f1 addpr \${addprlags} \${controls_addpr} \${dpi_legelec_lags}, cluster(ccode) eststo internal

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"African Elections Database." http://africanelections.tripod.com/gn.html.

Commentary Notes on the Concept Papers and Preliminary Drafts of the Thematic Committees of the Constituent Assembly of Nepal: International IDEA and Nepal Law Society, 2010.

The Constituent Assembly of Nepal: An Agenda for Women: International IDEA, 2008.

"Finally, Deal on 11 States, Mixed Governance Model." The Kathmandu Post, May 15, 2012.

Freedom in the World: Freedom House, 2009.

"Govt, Janajati Groups Sign 9-Pt Deal; Banda Called Off." The Kathmandu Post, May 22, 2012.

- The Interim Constitution of Nepal, 2063, as Amended by the First, Second and Third Amendments, (2007).
- "Mongolia Passes New Election Law Ahead of 2012 Parliamentary Election." *Xinhua*, Dec. 15, 2011.
- Nepal Backgrounder: Ceasefire Soft Landing Or Strategic Pause?: International Crisis Group, April 10, 2003.
- Nepal: Back to the Gun: International Crisis Group, October 22, 2003.
- *Nepalis Want New Constitution to Promote Decentralization and Equality.* Kathmandu, Nepal: The Carter Center, 2010.
- "Parties Okay Mixed Electoral System." The Kathmandu Post, December 13, 2011.
- *World Development Indicators*. Washington, D.C.: International Bank for Reconstruction and Development, 2008.
- ACE, The Electoral Knowledge Network. "Representation of Women in Ukraine." http://aceproject.org/electoral-advice/archive/questions/replies/304278384.
- Acharya, Mohan. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 3, 2011.
- Adhikari, Deepak. "Red Elite: A Deepening Divide within Nepal's Ruling Maoist Party could Lead to Greater Unrest." *The Caravan* (June 1, 2012).
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. "Fractionalization." *Journal of Economic Growth* 8, no. 2 (2003): 155-194.

- Alexander, Gerard. "Institutions, Path Dependence, and Democratic Consolidation." *Journal of Theoretical Politics* 13, no. 3 (July 01, 2001): 249-269.
- Andersen, David F. "Analyzing Who Gains and Who Loses: The Case of School Finance Reform in New York State." *System Dynamics Review* 6, no. 1 (1990): 21-43.
- Anderson, Edward G. "A Dynamic Model of Counterinsurgency Policy Including the Effects of Intelligence, Public Security, Popular Support, and Insurgent Experience." System Dynamics Review 27, no. 2 (2011): 111-141.
- Angrist, Joshua David and Jörn-Steffen Pischke. *Mostly Harmless Econometrics : An Empiricist's Companion*. Princeton: Princeton University Press, 2009.
- Ariga, Kenichi. "Entrenched Incumbents, Irresponsible Parties? Comparative Analysis of Incumbency Advantage Across Different Electoral Systems." 2010.
- Ashworth, Scott and Ethan Bueno de Mesquita. "Delivering the Goods: Legislative Particularism in Different Electoral and Institutional Settings." *The Journal of Politics* 68, no. 1 (Feb., 2006): pp. 168-179.
- Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. "Minority Representation, Empowerment, and Participation." *The Journal of Politics* 66, no. 2 (May, 2004): pp. 534-556.
- Barlas, Yaman. "Formal Aspects of Model Validity and Validation in System Dynamics." *System Dynamics Review* 12, no. 3 (1996): 183-210.
- Barlas, Yaman and Stanley Carpenter. "Philosophical Roots of Model Validation: Two Paradigms." *System Dynamics Review* 6, no. 2 (1990): 148-166.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. *Database of Political Institutions 2010*, 2010.
- Beck, Nathaniel and Jonathan N. Katz. "What to do (and Not to do) with Time-Series Cross-Section Data." *The American Political Science Review* 89, no. 3 (Sep., 1995): pp. 634-647.
- Benoit, Kenneth. "A Theory of Electoral Systems." *World Democratization Conference* (February 16-19, 2000, .
- Benoit, Kenneth. "Duverger's Law and the Study of Electoral Systems." *French Politics* 4, no. 1 (2006): 69-83.
- ——. "Electoral Laws as Political Consequences: Explaining the Origins and Change of Electoral Institutions." *Annual Review of Political Science* 10, no. 1 (June 2007): 363-390.

- Berglund, S., J. Ekman, and F. H. Aarebrot. *The Handbook of Political Change in Eastern Europe* Edward Elgar, 2004.
- Bhandari, Arjun, Prakash Acharya, Tika Pradhan, and Keshav Koirala. "PM Announces Fresh CA Elections on Nov 22." *The Himalayan Times*, May 27, 2012.

Bhusal, Pampha. Interview with Author, edited by Loeb, Brian. Patan, Nepal: June 20, 2011.

Birch, Sarah. Electoral System Change in New Democracies. Ontario Citizens Assembly. 2006.

——. *Electoral Systems and Political Transformation in Post- Communist Europe*. New York: Palgrave Macmillan, 2003.

——. *Embodying Democracy : Electoral System Design in Post- Communist Europe*. One Europe Or several?. New York: Palgrave Macmillan, 2002.

———. "Single-Member District Electoral Systems and Democratic Transition." *Electoral Studies* 24, no. 2 (6, 2005): 281-301.

- Blanc, Jarrett, Aanund Hylland, and Kåre Vollan. *State Structure and Electoral Systems in Post-Conflict Situations*. Washington, D.C.: IFES, 2006.
- Bloed, A., European Centre for Minority Issues, and T. E. A. Bozen/Bolzano. *European Yearbook of Minority Issues, Volume 2 (2002/2003)* Brill Academic Publishers, 2004.
- Bogaards, Matthijs. "Comparative Strategies of Political Party Regulation." In *Political Parties in Conflict-Prone Societies : Regulation, Engineering and Democratic Development*, edited by Reilly, Ben and Per Nordlund, 48-66. Tokyo; New York: United Nations University Press, 2008.
- Boix, Carles. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." *The American Political Science Review* 93, no. 3 (Sep., 1999): pp. 609-624.
- Borre, Ole, Sushil R. Panday, and Chitra K. Tiwari. "The Nepalese Election of 1991." *Electoral Studies* 10, no. 4 (12, 1991): 357-362.
- Bourguignon, Francois [editor], Martha de Melo, Cevdet Denizer, Allan Gelb, Stoyan Tanev, Harold Alderman, Paul Collier, et al. "New Tools in Comparative Political Economy: The Database of Political Institutions." *The World Bank Economic Review* 15, no. 1 (2001): 165-176.
- Bowler, Shaun, Todd Donovan, and Jeffrey A. Karp. "Why Politicians Like Electoral Institutions: Self-Interest, Values, Or Ideology?" *The Journal of Politics* 68, no. 2 (May, 2006): pp. 434-446.

- Bowler, Shaun, David J. Lanoue, and Paul Savoie. "Electoral Systems, Party Competition, and Strength of Partisan Attachment: Evidence from Three Countries." *The Journal of Politics* 56, no. 4 (Nov., 1994): pp. 991-1007.
- Brady, David and Jongryn Mo. "Electoral Systems and Institutional Choice." *Comparative Political Studies* 24, no. 4 (January 01, 1992): 405-429.
- Bylesjö, Cecilia, Rumbidzai Kandawasvika-Nhundu, and Stina Larserud. *Electoral System and Quotas in Nepal*: International IDEA, 2010.
- Chamberlin, John R. and Fran Featherston. "Selecting a Voting System." *The Journal of Politics* 48, no. 2 (May, 1986): pp. 347-369.
- Chang, C. C. and H. Tien. *Taiwan's Electoral Politics and Democratic Transition: Riding the Third Wave*: M.E. Sharpe, 1996.
- Chang, Eric C. C. "Electoral Incentives for Political Corruption Under Open-List Proportional Representation." *The Journal of Politics* 67, no. 3 (Aug., 2005): pp. 716-730.
- Chattopadhyay, Raghabendra and Esther Duflo. "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India." *Econometrica* 72, no. 5 (2004): 1409-1443.
- Cho, Wonbin and Michael Bratton. *Electoral Institutions, Partisan Status, and Political Support:* A Natural Experiment from Lesotho: Afro Barometer, 2005.
- Choucri, Nazli, Daniel Goldsmith, Stuart E. Madnick, Dinsha Mistree, J. Bradley Morrison, and Michael D. Siegel. "Using System Dynamics to Model and Better Understand State Stability." *MIT Sloan Research Paper no.* 4661-07 (2007): 1-39.
- Choudhry, Sujit. "Bridging Comparative Politics and Comparative Constitutional Law: Constitutional Design in Divided Societies." In *Constitutional Design for Divided Societies: Integration Or Accommodation?*, edited by Choudhry, Sujit, 3-40. New York: Oxford University Press, 2008.
- Clerides, Sofronis K., Saul Lach, and James R. Tybout. "Is Learning by Exporting Important? Micro-Dynamic Evidence from Colombia, Mexico, and Morocco." *The Quarterly Journal of Economics* 113, no. 3 (August 01, 1998): 903-947.
- Colomer, Josep Maria. *Political Institutions :Democracy and Social Choice*. Comparative European Politics. Oxford England; New York: Oxford University Press, 2001.
- Colomer, Josep Maria. "Strategies and Outcomes in Eastern Europe." *Journal of Democracy* 6, no. 2 (1995): 74-85.
- Committee on Determination of Forms of Governance of the State. *The Preliminary Draft of the Constitution and the Explanatory Note*: Constituent Assembly, 2009.

- Committee to Decide the Basis of Cultural and Social Solidarity. *The Preliminary Draft of the Constitution and the Explanatory Note*: Constituent Assembly, 2009.
- Cottrell, Jill. *Constituent Assembly Procedures from a Gender Perspective*: International IDEA, 2008.
- De Paola, Maria, Vincenzo Scoppa, and Rosetta Lombardo. "Can Gender Quotas Break Down Negative Stereotypes? Evidence from Changes in Electoral Rules." *Journal of Public Economics* 94, no. 5–6 (6, 2010): 344-353.
- Dev, Jitendra. Interview with Author, edited by Loeb, Brian. Kathmandu, Nepal: July 1, 2011.
- Devkota, Khimlal. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 20, 2011.
- Diskin, Hanna and Abraham Diskin. "The Politics of Electoral Reform in Israel." *International Political Science Review / Revue Internationale De Science Politique* 16, no. 1, The Politics of Electoral Reform. La politique de la réforme électorale (Jan., 1995): pp. 31-45.
- Donovan, Mark. "The Politics of Electoral Reform in Italy." *International Political Science Review / Revue Internationale De Science Politique* 16, no. 1, The Politics of Electoral Reform. La politique de la réforme électorale (Jan., 1995): pp. 47-64.
- Drukker, D. M. "Testing for Serial Correlation in Linear Panel-Data Models." *Stata Journal* 3, no. 2 (2003): 168-177.
- Dummett, Michael A. E. *Principles of Electoral Reform*. Oxford; New York: Oxford University Press, 1997.
- Duverger, Maurice. *Political Parties, their Organization and Acitivity in the Modern State* [Partis politiques.English]. 2d ed. London: Methuen, 1962.
- Eduardo Dargent, Paula Muñoz. "Democracy Against Parties? Party System Deinstitutionalization in Colombia." *Journal of Politics in Latin America* 3, no. 2 (2011): 43-71.
- Elections in New Zealand. "From FPP to MMP." http://www.elections.org.nz/voting/mmp/history-mmp.html.
- Elklit, Jørgen. "Electoral Institutional Change and Democratization: You can Lead a Horse to Water, but You can't make it Drink." *Democratization* 6, no. 4 (12/01; 2011/11, 1999): 28-51.
- European Institute for Research on Euro-Arab Cooperation. "MOROCCO, Electoral System." http://www.medea.be/en/countries/morocco/morocco-electoral-system/.

- Farrell, David M. *Electoral Systems : A Comparative Introduction*. 2nd ed. Houndmills, Basingstoke, Hampshire, UK; New York: Palgrave Macmillan, 2011.
- Fermin, Adriano. *Prospects and Scenarios for the Party List System in the Philippines*: Ateneo School of Government and Friedrich Ebert Stiftung (FES), Philippine Office, 2001.
- Follesdal, Andreas. *Federalism, Ethnicity and Human Rights in Nepal, Or: Althusius Meets Acharya:* Dalit Welfare Organization, 2009.

——. "Nepal's Constitution Writing Process: Rebuilding the Ship while at Sea." *International Journal on Minority and Group Rights* 18, no. 3 (2011): 287-291.

- Gallagher, Michael. "Conclusion." In *The Politics of Electoral Systems*, edited by Gallagher, Michael and Paul Mitchell, 535-578. Oxford; New York: Oxford University Press, 2005.
- Gallagher, Michael and Paul Mitchell. *The Politics of Electoral Systems*. Oxford; New York: Oxford University Press, 2005.
- Ghaffarzadegan, Navid, John Lyneis, and George P. Richardson. "How Small System Dynamics Models can Help the Public Policy Process." System Dynamics Review 27, no. 1 (2011): 22-44.
- Ghai, Yash. "Ethnic Identity, Participation and Social Justice: A Constitution for New Nepal?" *International Journal on Minority and Group Rights* 18, no. 3 (2011): 309-334.
- Gleditsch, Kristian Skrede. Expanded Trade and GDP Data, 2004.
- Gleditsch, N.P., P. Wallensteen, M. Eriksson, M. Sollenberg, and H. Strand. "Armed Conflict 1946–2001: A New Dataset." *Journal of Peace Research* 39, no. 5 (2002): 615-637.
- Gordon, Stacy B. and Gary M. Segura. "Cross-National Variation in the Political Sophistication of Individuals: Capability Or Choice?" *The Journal of Politics* 59, no. 1 (Feb., 1997): pp. 126-147.
- Gyawali, Pradeep. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 29, 2011.
- Hadenius, Axel and Jan Teorell. "Pathways from Authoritarianism." *Journal of Democracy* 18, no. 1 (2007): 143-156.
- Hainmueller, Jens and Holger Lutz Kern. "Incumbency as a Source of Spillover Effects in Mixed Electoral Systems: Evidence from a Regression-Discontinuity Design." *Electoral Studies* 27, no. 2 (6, 2008): 213-227.

- Heston, Alan, Robert Summers, and Bettina Aten. *Penn World Table*. University of Pennsylvania: Center for International Comparisons of Production, Income and Prices, 2009.
- Hoechle, D. "Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence." *Stata Journal* 7, no. 3 (2007): 281-312(32).
- Horowitz, Donald L. "Constitutional Design: Proposals Versus Processes." In *The Architecture* of *Democracy : Constitutional Design, Conflict Management, and Democracy*, edited by Reynolds, Andrew, 15-36. Oxford, UK; New York: Oxford University Press, 2002.
- IFES. "IFES Election Guide Country Profile: Cameroon." http://www.electionguide.org/country.php?ID=38.
 - ——. "IFES Election Guide Election Profile for Kyrgyzstan." http://www.electionguide.org/election.php?ID=1376.
- Inter-Parliamentary Union. "DJIBOUTI, Assemblée Nationale (National Assembly)." http://www.ipu.org/parline-e/reports/2089_E.htm.
- Jones, Mark P. "Gender Quotas, Electoral Laws, and the Election of Women." *Comparative Political Studies* 42, no. 1 (January 01, 2009): 56-81.

———. "Quota Legislation and the Election of Women: Learning from the Costa Rican Experience." *The Journal of Politics* 66, no. 4 (Nov., 2004): pp. 1203-1223.

- Jones, Peris and Malcolm Langford. "Between Demos and Ethnos: The Nepal Constitution and Indigenous Rights." *International Journal on Minority and Group Rights* 18, no. 3 (2011): 369-386.
- Katz, Richard S. "Electoral Reform and its Discontents." *British Elections & Parties Review* 9, no. 1 (01/01; 2012/04, 1999): 1-19.

——. "Why are there so Many (Or so Few) Electoral Reforms?." In *The Politics of Electoral Systems*, edited by Gallagher, Michael and Paul Mitchell, 57-76. Oxford; New York: Oxford University Press, 2005.

- Katzman, Kenneth. Iraq: Elections, Government, and Constitution: Congressional Research Service, 2006.
- Kazakhstan Embassy. "Political System of Kazakhstan." http://www.kazakhstanembassy.be/DisplayPage.asp?pid=183.
- Kenneth, Benoit. "Models of Electoral System Change." *Electoral Studies* 23, no. 3 (9, 2004): 363-389.

- Khanal, Krishna. "Choices of Electoral System for Nepal: Past Experiences and Alternatives." Kathmandu, Nepal, 2009.
- Kostadinova, Tatiana. "Do Mixed Electoral Systems Matter?: A Cross-National Analysis of their Effects in Eastern Europe." *Electoral Studies* 21, no. 1 (3, 2002): 23-34.
- Lane, David C. "The Folding Star: A Comparative Reframing and Extension of Validity Concepts in System Dynamics." Tokyo, Japan, 1995.
- Langford, Malcolm and Ananda Mohan Bhattarai. "Constitutional Rights and Social Exclusion in Nepal." *International Journal on Minority and Group Rights* 18, no. 3 (2011): 387-411.
- Election to Members of the Constituent Assembly Act, 2064, (2007).
- Lijphart, Arend. "Constitutional Design for Divided Societies." *Journal of Democracy* 15, no. 2 (2004): 96-109.
- Lijphart, Arend and Don Aitkin. *Electoral Systems and Party Systems :A Study of Twenty- Seven Democracies, 1945-1990.* Comparative European Politics. Oxford; New York: Oxford University Press, 1994.
- Lovenduski, Joni and Pippa Norris. *Gender and Party Politics*. London; Thousand Oaks, Calif.: Sage Publications, 1993.
- Lundell, Krister. *The Origin of Electoral Systems in the Post-War Era : A Worldwide Approach*. Routledge Research in Comparative Politics. Vol. 27. London; New York: Routledge, 2010.
- Mahat, Prakash Sharan. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 15, 2011.
- Mainwaring, Scott. "Politicians, Parties, and Electoral Systems: Brazil in Comparative Perspective." *Comparative Politics* 24, no. 1 (Oct., 1991): pp. 21-43.
- Marshall, M. G. and K. Jaggers. *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2002: Dataset Users' Manual.* Maryland: University of Maryland, 2002.
- Massicotte, Louis and André Blais. "Mixed Electoral Systems: A Conceptual and Empirical Survey." *Electoral Studies* 18, no. 3 (9, 1999): 341-366.
- Matland, Richard E. and Donley T. Studlar. "The Contagion of Women Candidates in Single-Member District and Proportional Representation Electoral Systems: Canada and Norway." *The Journal of Politics* 58, no. 3 (Aug., 1996): pp. 707-733.
- Matland, Richard E. and Michelle M. Taylor. "Electoral System Effects on Women's Representation." *Comparative Political Studies* 30, no. 2 (April 1, 1997): 186-210.
- McKelvey, Richard D. and Peter C. Ordeshook. "Information, Electoral Equilibria, and the Democratic Ideal." *The Journal of Politics* 48, no. 4 (Nov., 1986): pp. 909-937.
- Meadows, Donella H., Club of Rome, and Potomac Associates. *The Limits to Growth :A Report* for the Club of Rome's Project on the Predicament of Mankind. 2d ed. New York: Universe Books, 1974.
- Meisburger, Timothy M. "Getting Majoritarianism Right." *Journal of Democracy* 23, no. 1 (2012): 155-163.
- Moser, Robert G. and Ethan Scheiner. "Mixed Electoral Systems and Electoral System Effects: Controlled Comparison and Cross-National Analysis." *Electoral Studies* 23, no. 4 (12, 2004): 575-599.
 - ——. "Strategic Voting in Established and New Democracies: Ticket Splitting in Mixed-Member Electoral Systems." *Electoral Studies* 28, no. 1 (3, 2009): 51-61.
- Mozaffar, Shaheen. "Electoral Systems and Conflict Management in Africa: A Twenty-Eight-State Comparison." In *Elections and Conflict Management in Africa*, edited by Sisk, Timothy D. and Andrew Reynolds, 81-98. Washington, DC: United States Institute of Peace Press, 1998.
- Myerson, Roger B. "Effectiveness of Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis." *Games and Economic Behavior* 5, no. 1 (1, 1993): 118-132.
- Nemwang, Subash Chandra. "A Memorandum by CA Chair Subash Chandra Nemwang to Prime Minister Madhav Kumar Nepal, UCPN (Maoist) Chairman, UML Chairman and the Nepali Congress President in Order to Ensure the Rights of Indigenous Peoples in the New Constitution."
- Newey, Whitney K. and Kenneth D. West. "A Simple, Positive Semi-Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix." *Econometrica* 55, no. 3 (May, 1987): pp. 703-708.
- Nishikawa, Misa and Erik S. Herron. "Mixed Electoral Rules' Impact on Party Systems." *Electoral Studies* 23, no. 4 (12, 2004): 753-768.
- Norris, Pippa. "Ballots Not Bullets: Testing Consociational Theories of Ethnic Conflict, Electoral Systems, and Democratization." In *The Architecture of Democracy : Constitutional Design, Conflict Management, and Democracy*, edited by Reynolds, Andrew, 206-247. Oxford, UK; New York: Oxford University Press, 2002.
- ——. "Conclusions: Comparing Legislative Recruitment." In *Gender and Party Politics*, edited by Lovenduski, Joni and Pippa Norris, 309-330. London; Thousand Oaks, Calif.: Sage Publications, 1993.

——. "Cultural Explanations of Electoral Reform: A Policy Cycle Model." *West European Politics* 34, no. 3 (May 2011): 531-550.

——. . Democracy Time - series Dataset, 2009.

------. Driving Democracy :Do Power-Sharing Institutions Work?. Cambridge; New York: Cambridge University Press, 2008.

—. "The Politics of Electoral Reform in Britain." *International Political Science Review / Revue Internationale De Science Politique* 16, no. 1, The Politics of Electoral Reform. La politique de la réforme électorale (Jan., 1995): pp. 65-78.

- Ojeda, Raquel. *Electoral Report: MAURITANIA/Presidential Elections*. Universidad Autónoma de Madrid: Election Watch, 2009.
- Orlović, Slaviša. "Europeanization and Democratization of Parties and Party System of Serbia." *Politics in Central Europe* 3, no. 1 (2007): 92-104.
- Overby, L. Marvin and Kenneth M. Cosgrove. "Unintended Consequences? Racial Redistricting and the Representation of Minority Interests." *The Journal of Politics* 58, no. 2 (May, 1996): pp. 540-550.
- Paudel, Ram Chandra. Agreement 1: Between Nepal Government and NEFIN, United Indigenous Struggle Committee Representatives. Received by Gurung, Om, K. B. Gurung. Translated by Bhandary, Rishikesh Ram. Kathmandu, Nepal: August 7, 2007.

—. Agreement 3: Between Nepal Government and National Alliance for Republic and Federalism Representatives. Received by Buddhist, D. K. Translated by Bhandary, Rishikesh Ram. Kathmandu, Nepal: August 7, 2007.

- Persson, Torsten, Guido Tabellini, and Francesco Trebbi. "Electoral Rules and Corruption." *Journal of the European Economic Association* 1, no. 4 (Jun., 2003): pp. 958-989.
- Pokharel, Bhojraj. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: July 19, 2011.

Powley, Elizabeth. Rwanda: Women Hold Up Half the Parliament: International IDEA, 2005.

Prabkhakar, Janardan Sharm. Agreement 2: Between Nepal Government and Tamang Representatives. Received by Tamang, Suryaman Dong. Translated by Bhandary, Rishikesh Ram. Kathmandu, Nepal: August 7, 2007.

Pradhan, Tika. "UCPN-M Splits, CPN, Maoist Born." The Himalayan Times, June 19, 2012.

- Rae, Douglas W. *The Political Consequences of Electoral Laws*. New Haven: Yale University Press, 1967.
- Rahat, Gideon. "The Politics of Electoral Reform: The State of Research." *Journal of Elections, Public Opinion & Parties* 21, no. 4 (11/01; 2012/04, 2011): 523-543.
- Rana, Kalpana. Constitution Drafting does Not seem to be Easy Unless the Political Parties Agree in Principle: International IDEA, April 2011.
- Reilly, Ben. *Democracy and Diversity : Political Engineering in the Asia-Pacific*. Oxford Studies in Democratization. Oxford; New York: Oxford University Press, 2006.

——. *Democracy in Divided Societies: Electoral Engineering for Conflict Management*. Cambridge: Cambridge University Press, 2001.

. "Electoral Systems for Divided Societies." *Journal of Democracy* 13, no. 2 (2002): 156-170.

- Reilly, Ben and Per Nordlund. *Political Parties in Conflict-Prone Societies : Regulation, Engineering and Democratic Development*. Tokyo; New York: United Nations University Press, 2008.
- Reilly, Ben and Andrew Reynolds. "Electoral Systems and Conflict in Divided Societies." In International Conflict Resolution After the Cold War, edited by Stern, Paul C., 420-482. Washington, D.C.: National Academy Press, c2000, 2000.
- Renwick, Alan. *The Politics of Electoral Reform : Changing the Rules of Democracy*. Cambridge U.K.; New York, N.Y.: Cambridge University Press, 2010.
- Reynolds, Andrew. *The Architecture of Democracy : Constitutional Design, Conflict Management, and Democracy.* Oxford Studies in Democratization. Oxford, UK; New York: Oxford University Press, 2002.

——. *Electoral Systems and the Protection and Participation of Minorities*. Minority Rights Group International. London: Minority Rights Group International, 2006.

——. *Designing Democracy in a Dangerous World*. Comparative Politics. Oxford: Oxford University Press, 2011.

——. *Electoral Systems and Democratization in Southern Africa*. Oxford Studies in Democratization. Oxford; New York: Oxford University Press, 1999.

Reynolds, Andrew and John M. Carey. "Getting Elections Wrong." *Journal of Democracy* 23, no. 1 (2012): 164-168.

- Reynolds, Andrew, Ben Reilly, and Andrew Ellis. *Electoral System Design: The New International IDEA Handbook.* Stockholm, Sweden: International Institute for Democracy and Electoral Assistance, 2005.
- Rijal, Minendra. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 24, 2011.

. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: July 12, 2011.

- Rissmiller, Kent. "Approaching a Model of Policy Change: A Challenge to Political Science." Bergen, Norway, 2000.
- Rokkan, Stein. *Citizens, Elections, Parties; Approaches to the Comparative Study of the Processes of Development.* Comparative Studies of Political Life, 1. New York: McKay, 1970.
- Six-Point Agreement, (November 7, 2006).
- Sherpa, Ang Kaji. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 28, 2011.
- Shugart, Matthew Soberg. "Comparative Electoral Systems Research: The Maturation of a Field and New Challenges Ahead." In *The Politics of Electoral Systems*, edited by Gallagher, Michael and Paul Mitchell, 25-56. Oxford; New York: Oxford University Press, 2005.

- Sisk, Timothy D. and Andrew Reynolds. *Elections and Conflict Management in Africa*. Washington, DC: United States Institute of Peace Press, 1998.
- Sofie, Marien. "The Effect of Electoral Outcomes on Political Trust: A multi-level Analysis of 23 Countries." *Electoral Studies* 30, no. 4 (2011).
- Stedman, Stephen John. "Spoiler Problems in Peace Processes." *International Security* 22, no. 2 (Autumn, 1997): pp. 5-53.
- Stern, Paul C., Daniel Druckman, and National Research Council. *International Conflict Resolution After the Cold War*. Washington, D.C.: National Academy Press, c2000, 2000.
- Sunar, Gajadhar. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 29, 2011.
- Taagepera, Rein. "Designing Electoral Rules and Waiting for an Electoral System to Evolve." In *The Architecture of Democracy : Constitutional Design, Conflict Management, and*

^{——. &}quot;Electoral 'Efficiency' and the Move to Mixed-Member Systems." *Electoral Studies* 20, no. 2 (6, 2001): 173-193.

Democracy, edited by Reynolds, Andrew, 248-264. Oxford, UK; New York: Oxford University Press, 2002.

- Taagepera, Rein and Matthew Soberg Shugart. Seats and Votes : The Effects and Determinants of Electoral Systems. New Haven: Yale University Press, 1989.
- Tamang, Leena Rikkila. *Interview with Author*, edited by Loeb, Brian. Patan, Nepal: June 16, 2011.
- Teorell, Jan, Marcus Samanni, Sören Holmberg, and Bo Rothstein. *The Quality of Government Dataset*. University of Gothenburg: The Quality of Government Institute, 2011.
- Thames, Frank C. and Margaret S. Williams. "Incentives for Personal Votes and Women's Representation in Legislatures." *Comparative Political Studies* 43, no. 12 (December 1, 2010): 1575-1600.
- Tharu, Khushee. Interview with Author, edited by Loeb, Brian. Patan, Nepal: June 23, 2011.
- The Parliament of Sri Lanka. "The Electoral System." http://www.parliament.lk/about_us/electoral_system.jsp.
- Tripathi, Dinesh. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: June 21, 2011.
- Tripp, Aili Mari and Alice Kang. "The Global Impact of Quotas." *Comparative Political Studies* 41, no. 3 (March 01, 2008): 338-361.
- Tushnet, Mark. "Some Skepticism about Normative Constitutional Advice." *William and Mary Law Review* 49, (2007-2008): 1473-1496.
- U.S. Department of State, Bureau of African Affairs. "Background Note: Sierra Leone." http://www.state.gov/r/pa/ei/bgn/5475.htm.
- UNDP. "Programme on Governance in the Arab Region." http://www.pogar.org/countries/theme.aspx?t=3&cid=20.
- Unified Communist Party of Nepal (Maoist). Constitution of the People's Federal Republic of Nepal, 2067 (Proposed Integrated Draft), 2010.
- Usa, I. and U.S.A.I.B. Publications. *Togo Business Intelligence Report*. Intl Business Pubns USA, 2009.

Vollan, Kåre. "Alternative Quotas."

------. "A Comparison between Three Systems of Representation."

. *E-Mail*, received by Loeb, Brian. May 28, 2012.

——. "Group Representation and the System of Representation in the Constituent Assembly and Future Parliaments of Nepal." *International Journal on Minority and Group Rights* 18, no. 3 (2011): 343-368.

. Interview with Author, edited by Loeb, Brian. Kathmandu, Nepal: June 27, 2011.

——. "The System of Representation for the Constituent Assembly Elections in Nepal: An Assessment and Suggestions for Future Elections."

- Vowles, Jack. "The Politics of Electoral Reform in New Zealand." *International Political Science Review / Revue Internationale De Science Politique* 16, no. 1, The Politics of Electoral Reform. La politique de la réforme électorale (Jan., 1995): pp. 95-115.
- Wallem, Mark and Ram Guragain. *Interview with Author*, edited by Loeb, Brian. Kathmandu, Nepal: July 18, 2011.
- Welch, Susan and Donley T. Studlar. "Multi-Member Districts and the Representation of Women: Evidence from Britain and the United States." *The Journal of Politics* 52, no. 2 (May, 1990): pp. 391-412.
- Widner, Jennifer. "Constitution Writing in Post-Conflict Settings: An Overview." William and Mary Law Review 49, (2007-2008): 1513-1542.
- Wolff, Stefan. "Building Democratic States After Conflict: Institutional Design Revisited." *International Studies Review* 12, no. 1 (2010): 128-141.
- Wooldridge, Jeffrey M. Introductory Econometrics : A Modern Approach. Mason, Ohio: South-Western College Pub., 2003.