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FROM DUVERGER TO ROKKAN AND BACK

Progress and challenges in the study of electoral systems

Gabriel L. Negretto[1]

Traditional electoral studies have primarily been concerned with the effect of the rules of election on party systems and with the consequences of the rules of candidate selection on party organization and behavior. More recently, a considerable number of scholars have addressed the potential endogeneity of electoral rules; in particular, how the conditions of party competition may themselves trigger processes of electoral change. In this chapter, I discuss some central topics in the literature on the party system effects of electoral rules and on the determinants of electoral reform, two areas of electoral research that reveal the progress made and the challenges ahead in the more general study of political institutions.

In relation to the effect of electoral rules on party formats, I argue that progress in specifying and testing the interaction of electoral structures both with broader institutional configurations and with non–institutional factors stands in contrast with the still limited theoretical understanding of how politicized dimensions of conflict emerge in a polity and how they affect the number of parties. As regards electoral change, I propose that although the strategic model has made important contributions to understanding the origins of electoral rules, it needs to be revised to incorporate the existence of diverse historical paths and varying conditions of electoral reform. In particular, it must relax the assumption that reformers have complete information, that they maximize short-term partisan interests under every condition, and that the political elite have perfect control over the process of reform. The chapter concludes by discussing the need to incorporate the mutual causal effects between politicized dimensions of conflict, party systems, and electoral reform into a single, dynamic theoretical framework.

The party system effects of electoral systems

Most research on electoral systems has been devoted to the analysis of Duverger's propositions about the party system effects of plurality, two-ballot majority, and proportional formulas. As this research agenda has evolved, political scientists have accumulated a great deal of knowledge about the way electoral systems work and how their effects are conditional on a variety of institutional and non-institutional factors. Yet advances in the empirical analysis of the mechanics of electoral systems and conditional relationships have not been accompanied by similar progress

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in the theoretical understanding of the exact causal role of electoral rules in a world plagued by mutual causality.

Electoral rules as independent causal factors: the mechanical effect

In 1951 Duverger proposed that while plurality rule tends to party dualism, two-ballot majority and proportional representation systems tend toward multipartism (Duverger 1957: 232–233). The analysis of these propositions led to a vast literature. I will consider only some key contributions about the party system effects of single-member district plurality (SMDP) and proportional representation (PR) systems, the most advanced areas of research in both theory building and empirical testing.

All electoral systems reduce the number of electoral parties to a smaller number of legislative parties.[2] However, this effect, which Duverger labeled "mechanical," is stronger in SMDP than in PR systems. For this reason, SMDP has a discernible "psychological" effect: Voters tend to cast a vote for their second-order preferences to avoid wasting their votes and political leaders tend not to launch an independent party into the competition to avoid losing an election against stronger competitors (Duverger 1957: 252; Cox 1997). As a result of both effects, SMDP tends not only to preserve an established two-party competition but also to restore party dualism when it has been disrupted by the emergence of a third party (Duverger 1957: 254).

Most of the initial research on Duverger's propositions was aimed at exploring the hypothesis that electoral institutions have an independent causal effect on party systems. Evidence about the mechanical effects of electoral formulas on the number of legislative parties seemed to support this hypothesis. It was firmly established that levels of disproportionality between votes and seats vary significantly across electoral systems (Rae 1971). Specifically, scholars found ample evidence that disproportionality is higher in SMDP than in PR systems (Lijphart 1994: 95–117; Katz 1997: 137). When looking at the number of legislative parties, scholars also found a strong association between discrete electoral formulas and levels of party system fragmentation (Norris 1997: 307; Lijphart 1994). These findings do not, however, validate Duverger's theory as it was proposed.

Plurality rule is supposed to have a built-in disincentive for small parties to compete alone or for voters to support them. For this reason, it favors the creation of a two-party system and contributes to its maintenance over time. PR formulas, in contrast, are associated with more than two parties because they lack the disincentives that plurality systems have for small parties to compete or for new parties to form. As a consequence, PR increases the probability of multiple parties but does not determine it; multipartism would only occur if in a given country voters really demanded more parties and political leaders were able to form them. This is why Riker proposed (1986: 26–30) that whereas the reductive effect of SMDP should be considered a "law," the multiplying effect of PR is simply a "hypothesis."

Duverger's "law," however, needed some refinements to account for deviant cases. In Canada and India, plurality systems have coexisted with more than two significant parliamentary parties at the national level. In the case of Canada, the explanation for the anomaly was that one of the third parties nationally was continually one of the two main parties locally (Sartori 1968; Rae 1971). In India, it was argued that more than two parties existed at both local and national levels because of the presence of a centrist party in most districts (the Congress Party) that prevented the formation of coalitions of small parties located to its left and to its right (Riker 1986). The revision of these cases thus led to a reformulation of the law to the claim that a plurality system will produce and maintain a nationwide two-party system *except* when strong minority parties are concentrated in certain constituencies or geographical pockets and when one party

among several is almost always the Condorcet winner in elections (Sartori 1994: 40–41; Riker 1986: 32).

Even if stated in probabilistic terms, Duverger's hypothesis also needed reconsideration for the purposes of comparative analysis. PR systems can differ widely and it is not obvious how these variations are associated with different numbers of parties. Moreover, there are several electoral systems that mix proportional and plurality formulas and give different weight to one or the other (Gallagher 2005: 549). Obviously, either variations within the formula or some other component of the electoral system should be used if we want to assess the number of parties associated with PR.

Sartori (1968) proposed that within PR systems the larger the magnitude of (seats contested in) the district, the greater the number of parties winning votes and seats in the district should be. This view has been generalized and most scholars now consider district magnitude as the key variable that determines the number of parties (Taagepera and Shugart 1989).[3] The great advantage of this variable is that it can be used to make comparisons not only within PR formulas but also across different electoral systems. Since the outcome of interest is usually the national party system, a single measure is needed to capture the aggregate effect of electoral districts when they vary in magnitude. The national average district magnitude is the most commonly used measure, but there are alternative formulas to estimate the nationwide district magnitude in mixed-member electoral systems and PR systems with multiple tiers (see Gallagher and Mitchell 2005; Teorell and Lindstedt 2010).

However, district magnitude as a single determinant of party systems also presents problems. There is evidence that higher district magnitudes are negatively associated with disproportionality. But the expected association between district magnitude and party system formats is not always supported. In qualitative analyses using relatively few cases, the association between district magnitude and the number of parties (both electoral and legislative) appears to be weak (Gallagher 2005: 549; Morgenstern and D'Elia 2007). Large–N statistical analyses detect a stronger correlation, but they sometimes overestimate the mechanical effect by not taking into account that the observed effect of district magnitude on the number of legislative parties has already been pre–filtered by the impact that the same variable had on the number of parties winning votes (Benoit 2002: 39). Moreover, even when the indirect impact of district magnitude on the number of electoral parties is considered, results may vary. Teorell and Lindstedt (2010: 443) show that the impact of larger districts on the proportionality of votes and seats may be statistically significant or not depending on the way in which average district magnitude is measured in multitier systems and on whether the analysis includes new democracies.

Electoral rules as intervening variables: the psychological effect

The most interesting investigation into the political consequences of electoral rules is on the influence of the latter on the number of parties competing and winning votes in an election. This analysis offers a better understanding of the macro–level phenomena that affect the process of party formation in a polity and the micro–level mechanisms (Duverger's "psychological" effect) that influence the strategic incentives of party leaders to launch new parties to compete and of voters to vote for them (Blais and Carty 1991; Coppedge 1997; Cox 1997). Since these processes both affect and are affected by the existing electoral system, they provide a closer look at the exact causal role of electoral systems on the shape of the party system. Over time, the attempt to link macro structures with micro–level mechanisms began to cast doubt on whether electoral rules really have an independent causal effect.

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One of the first questions about the determinants of electoral parties is whether institutional factors other than district magnitude intervene in the calculations of party strategists and voters.[4] Duverger only examined parliamentary elections; his predictions may not hold in presidential systems. Presidential elections may "contaminate" legislative elections depending on what formula is in place to elect presidents and on the electoral cycle. The multiparty effect of PR may be neutralized if plurality is used to elect presidents and presidential and legislative elections are held concurrently. By contrast, the tendency toward multipartism may be reinforced when runoff formulas are used to elect presidents and/or when presidents and legislators are elected in non–concurrent cycles (Shugart and Carey 1992; Jones 1995; Shugart 1995). The impact of presidential electoral formulas on electoral parties is, however, indirect, acting through the number of presidential candidates.[5] Using this approach, various empirical tests have confirmed that temporally proximate presidential elections stop having a reductive effect on the number of electoral parties when the number of candidates competing in presidential elections is sufficiently high (Amorim Neto and Cox 1997; Cox 1997; Golder 2006).

Another important addition to the analysis of the number of electoral parties is the impact of non–institutional variables such as the number of cleavages that divide citizens in a given society. This deserves special attention because it goes beyond the simple incorporation of a new variable into the estimation of the party system effects of electoral rules.

Lipset and Rokkan (1967; Rokkan 2009 [1970]) argued that the shape of national party systems emerged from the particular timing, sequence, and structure of basic sociocultural cleavages triggered by the processes of nation-building, industrialization, and democratization. This literature analyzed electoral structures as interacting with parties and party systems, but mostly as dependent rather than as independent variables.[6] Duverger did not theorize about the conversion of sociocultural cleavages into national party systems and he famously argued for the causal role of electoral systems in determining the number of parties. Yet at various stages in his analysis, Duverger clearly suggests that the number and structure of political divisions in a polity (often but not always derived from sociocultural factors), along with electoral structures, affect the number of parties in a polity (Duverger 1957: 259–261).

Two different strands of the literature have explored the role of non–institutional determinants of party systems. The first is theory oriented and has attempted to develop an analytic framework to understand the relationship between sociopolitical heterogeneity and the number of parties (Lijphart 1984, 1999; Taagepera and Grofman 1985; Taagepera 1999). A second body of literature, with a more empirical approach, seeks to find the correct statistical specification for the influence of both social and electoral structures on the number of parties (Powell 1982; Ordeshook and Schvestova 1994; Amorim Neto and Cox 1997; Clark and Golder 2006). Since the statistically oriented literature has set the current standard of research in this area, I will summarize its perspective and findings.

The new literature sees the number of parties as a multiplicative rather than an additive function of electoral permissiveness and social heterogeneity.[7] The interactive model is based on the idea that electoral rules (measured by district magnitude) merely exert a constraining or permissive effect on the influence that social heterogeneity has on the supply of parties for which citizens cast their votes (Ordeshook and Schvestova 1994: 101). Accordingly, a polity will have many electoral parties only if it has *both* many cleavages *and* a permissive enough electoral system (Amorim Neto and Cox 1997: 155). A second feature of this literature is the way in which social heterogeneity is conceptualized and measured. Whereas in the theoretical literature social heterogeneity is analyzed through the number of issue dimensions, understood as the *politicized* dimensions of conflict in a society, the statistical literature mostly restricts it to the effective number of ethnic groups.[8]

Scholars have confirmed the interactive effect of district magnitude and ethnic heterogeneity on the number of electoral parties. Amorim Neto and Cox (1997) demonstrate that multi-party competition in legislative elections and multi-candidate competition in presidential elections are the joint product of many social cleavages *and* a permissive electoral system. Clark and Golder (2006: 700) provide a more specific test that shows that the marginal effect of social heterogeneity is positive and significant once the district magnitude becomes sufficiently permissive. In a parallel analysis on presidential elections, Golder (2006: 45) also shows that whereas social heterogeneity significantly increases the number of candidates competing in runoff (that is, permissive) presidential elections, it does not have any effect in plurality rule (that is, restrictive) elections. In spite of its seemingly robust findings, however, this research agenda raises a number of important substantive and methodological questions about the impact of electoral rules on party competition.

Conceptualization of cleavages, reverse effects, and equilibrium outcomes

Using ethnic fragmentation as a proxy for social heterogeneity has several advantages for the purpose of statistical testing. First, there are several available indexes of ethno-linguistic fragmentation that cover most countries of the world. Moreover, this measurement surely captures divisions that are exogenous to the electoral structure, thus avoiding the potential endogenous effect of the latter on the actual political divisions in a country.[9] Even so, reducing the sociological determinants of electoral parties to the number of ethno-linguistic cleavages is problematic.

As Lipset and Rokkan (1967: 6–7) and Duverger (1957: 260–261) argued, ethnicity is just one among many other sociocultural factors such as region, class, and religion that can lead to political divisions. Some cleavages, such as those that relate to regime support or foreign policy, are purely political and unrelated to the social structure (Duverger 1957: 260; Lijphart 1999: 85). More importantly, even if we agree that political divisions are primarily determined by preexisting social structures and that ethnic fragmentation is the most relevant division, it is conceptually implausible to think that social cleavages automatically translate into political cleavages. Social cleavages need to be transformed into explicit political conflicts to affect party formation and competition (see Coppedge 1997; Taagepera 1999).

The problem is that it is not clear what determines the politicization of underlying social divisions. Several countries in Latin America, for instance, have had ethnically divided societies during democratic periods before and after the expansion of electoral democracy in the region in the 1980s. Yet it was not until the 1990s, when ethnicity became a politically salient issue, that new ethnic-based parties were formed and managed to win significant portions of the vote. Interestingly, there is scant evidence that variations in district magnitude worked as an intervening variable to account for changes in the supply of ethnic-based parties (Van Cott 2003: 16). It seems obvious that both the opportunity set and strategic skills of political leaders were crucial for explaining when new ethnic parties emerged and when they became successful in exploiting a preexisting social division.

Interactive models apparently assume that social cleavages determine both the "demand" of voters for parties and the incentives of political elites to "supply" them. Yet a reverse causality is possible (see Colomer and Puglisi 2005). Political elites may themselves activate the demand of voters by launching parties that turn a dormant dimension of conflict into an active one. Moreover, political entrepreneurs might introduce new dimensions of conflict unrelated to the social structure. Lipset and Rokkan (1967: 3) acknowledged (although they did not explore) this possibility when they hypothesized that "parties themselves might establish themselves as significant poles of attraction and produce their own alignments independently of the geographical, the social, and the cultural underpinnings of the movements."[10]

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If strategic politicians have an influence in the politicization of latent cleavages, it means that the number of relevant dimensions of conflict in a country may change over time. However, social cleavages in general and ethnic cleavages in particular are relatively constant, so they cannot account for variations in the number of parties over time within a single country. The problem is apparent when the electoral system remains unchanged. The United Kingdom had an average of 2.3 electoral parties from 1950 to 1970, but between 1974 and 1997 this average increased to 3. Obviously, neither ethnic cleavages nor the electoral system can explain the shift because both remained constant across these periods. Within the same structure of social cleavages, there are also cases in which both the electoral system and the number of electoral parties have changed over time, but not in the expected direction. For instance, in Peru—a country with a relatively high degree of ethnic fragmentation—the number of electoral parties has decreased and increased over time. However, this country experienced a decrease in the number of electoral parties just when the electoral system became more permissive (from 1993 to 2000) and an increase when it became more restrictive (from 2000 to 2006).[11]

The nature of the interaction between social heterogeneity and electoral structures is unclear in recent reformulations of Duverger's theory. Most works attempt to retain the deterministic nature of the effects of plurality systems by proposing that they should discourage the formation of more than two parties, *regardless* of the level of heterogeneity of the social structure (Ordeshook and Schvestova 1994; Clark and Golder 2006). Cross–national statistical tests do show that social heterogeneity (as measured by ethnic heterogeneity) has no significant effect when district magnitude equals one (Clark and Golder 2006: 700). But does it mean that we should expect the same number of parties whatever the number of dimensions of political conflict in the country? This expectation would be inconsistent with the social choice literature.

As Taagepera and Grofman (1985: 346) point out, Duverger's Law cannot apply to a multidimensional space because in such scenario there is no median voter ideal point to which parties will converge—leading, in equilibrium, to a two-party competition. For this reason, these authors propose and provide evidence that, even assuming a reductive effect, a plurality system with more than one issue dimension should have between 2 and 3 parties (Taagpera and Grofman 1985: 344).[12] In other words, the impact of the number of dimensions of political conflict on the number of parties should lead to the conclusion that in no case can electoral rules (whether restrictive or permissive) be considered independent causal factors.

This perspective suggests a different view of anomalies in the comparative analysis of plurality systems. India may have more than two parties simply because it has multiple dimensions of political conflict, not because of the existence of a median party in most districts, as Riker would have it. As I pointed out earlier, it has been argued that the reason why Canada has more than two parties is that geographically local parties are the main parties in some provinces, while they are third or lower at the national level. Yet it is also true that the larger number of parties in Canada correlates with the fact that it has more than one dimension of political conflict (see Lijphart 1999) and a relatively high level of ethnic heterogeneity. This may explain why New Zealand, with only one relevant dimension of conflict and a lower level of ethnic heterogeneity, had an average of 2.5 electoral parties from 1946 to 1993 (the year it shifted to a mixed system), whereas Canada had 3.1 electoral parties from 1949 to 2000. Moreover, it may also be the case that the geographic concentration of the vote in Canada is itself determined by the structure of social cleavages at the provincial level, as some tests have shown (see Tanaka 2005: 73–76).

If the impact of sociopolitical heterogeneity clarifies differences among plurality systems, it makes the comparative analysis of permissive electoral systems with PR or mixed formulas more uncertain. Since sociopolitical heterogeneity (however measured) and the nationwide district magnitude may vary in different and not necessarily consistent ways, it is not clear what expectations

we should have when comparing countries that have different scores in both sociopolitical hetero-geneity and district magnitude.

A final note is appropriate about equilibrium outcomes under different electoral rules. Evidence in support of the interactive model is weaker among new democracies than among established democracies (Clark and Golder 2006: 702). Since both voters and party elites need time to learn and internalize the effects of electoral rules, it may be that many early elections in new democracies are off-equilibrium. The underlying problem, however, transcends the dichotomy between new and old democracies. No matter how many years a democratic regime has lasted since its inauguration, we have no theory to predict exactly how many elections are necessary for an electoral system to produce an equilibrium number of parties. And even when an electoral system has been in force for several years, off-equilibrium elections may occur, sometimes triggering a process of electoral reform.[13] This puts into question how units of observation are selected in statistical analyses when comparing electoral systems of widely different duration and elections (in new or old democracies) that take place at various times during the life of these systems.[14] It also suggests that electoral outcomes and electoral system change may be closely interrelated.

The origins and reform of electoral systems

One of the earliest criticisms of Duverger's theory was that the French jurist got the causality wrong: It is not electoral systems that cause party systems but the other way around (see Grumm 1958). In fact, Duverger himself acknowledged (1957: 232, 270) that two-party or dominant party systems are likely to choose SMDP, whereas multiparty systems are likely to opt for PR formulas. This endogeneity is not fatal, however, for the study of electoral system effects.

The relationship between electoral and party systems is one of mutual causation (Taagepera 2007: 7). Parties are temporally prior to electoral systems; they are the agents that create them. At the same time, parties choose a particular electoral system over other alternatives because they expect to benefit from it. The effects of electoral systems can nevertheless be studied in isolation from the intentions of strategic politicians. Electoral outcomes result from the interaction between electoral rules and environmental parameters (number of voters, number of parties competing, etc.) whose features cannot be fully anticipated by institutional designers at the time of choice (Shvetsova 2003).

All these reasons justify the separate analysis of electoral system effects. The relevant question is whether electoral rules should be analyzed *only* as independent variables. This perspective would be acceptable if electoral systems were always stable; but they are not. It is for this reason that the recent development of studies on electoral reform is a welcome event. This literature makes a valuable contribution to understanding not only electoral system change but also institutional change more generally. I will address three main issues: the frequency of electoral system change, the need to expand strategic models to account for the diverse conditions of electoral reform, and the multiple causal links that should be observed in the explanation of electoral system choice.

The frequency of electoral reform

It is part of the conventional wisdom of electoral studies that electoral reform is a rare event. Given the costs of information and learning implied in institutional change, it is argued that electoral reform tends to be infrequent and, when it occurs, incremental. As Shugart and Taagepera (1989: 218) summarize, "familiarity breeds stability."[15] Yet the stability of electoral systems is not a constant; it varies significantly across countries and regions.

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Whether we see electoral systems as stable or unstable depends on our prior assessment of what events qualify as electoral change. Perceptions of stability usually restrict the notion of electoral change to a shift from one of the main electoral formulas to the other. Under this definition, Lijphart finds evidence of electoral stability in that no country changed from plurality to PR or vice versa in his study of 27 stable electoral democracies from 1945 to 1990 (Lijphart 1994: 52). In a similar vein, but including presidential elections, Katz (2005: 58) observes that only 14 major changes in the electoral formula to elect legislators and executives have occurred among all countries that have had uninterrupted democratic regimes between 1950 and 2001. These observations of electoral stability do not take into account the relatively more frequent changes that occur at the level of district magnitude, assembly size, or legal thresholds. The problem is that these reforms may have equally (or more) significant effects on party competition to a change in the electoral formula.

It is also important to note that the prediction of stability and inertia in the basic components of electoral systems is almost always restricted to analyses of established democracies. The picture changes dramatically if we include new democracies. According to Negretto (2013: 25–29), merely between 1978 and 2008, new democracies in Latin America underwent 45 major electoral changes in their formulas to elect presidents and systems to elect deputies, which includes shifts in the electoral formula and changes of more than 25 percent in the average magnitude of the districts and the size of the assembly. Other authors (Birch *et al.* 2002) have found a similar pattern of electoral system instability in Eastern Europe, particularly during the 1990s.

The perception that electoral rules change little and rarely is probably responsible for the scant attention that electoral reform has received until recently. Except for the analysis of the historical origins of the shift to PR in Western Europe, few scholars have focused on electoral reform and change as a distinct aspect in the analysis of electoral systems. The electoral reforms in France in the 1980s, in New Zealand, Italy, and Japan in the 1990s, and the proliferation of electoral changes in the new democracies of Latin America and Eastern Europe have dispelled the perception that institutional stability is the norm across countries and regions. However, how to assess the frequency of reforms and the conditions that affect the stability of electoral systems has yet to be specified in a more systematic way.[16]

The strategic model of electoral reform

Rational choice theories, particularly those that emphasize the distributive consequences of institutional arrangements, are well equipped to explain electoral reform. Naturally, if the creation and maintenance of institutions reproduce the existing distribution of power resources among self-interested actors, institutions should not remain stable if the interests or resources of these actors change. It follows from this perspective that governing parties would tend to replace existing electoral rules when these rules no longer serve their interests or when parties that lost under the existing rules gain sufficient influence to induce a reform. This framework of analysis has been developed by several authors, among them Boix (1999), Benoit (2004), and Colomer (2004, 2005).

In its more general, comparative formulation, the power-maximization model postulates that whereas large or ascending parties support restrictive electoral rules, small or declining parties tend to favor the adoption of inclusive electoral rules, such as PR for legislative elections (Geddes 1996; Colomer 2004, 2005) and more–than–plurality rules for presidential elections (Negretto 2006). The strategic model has also been specified in more substantive terms to explain the historical origins of major electoral reforms, such as the adoption of PR rules in Europe at the beginning of the twentieth century (Rokkan 2009 [1970]; Boix 1999).

Scholars using different formulations of the power-maximization model have shown convincing qualitative and quantitative evidence that support its main propositions. Yet there is a lively and growing debate about its applications and explanatory reach. One version of this debate questions whether there is a unique set of conditions that induces parties to reform the electoral system for their own advantage. Another version questions some of the basic assumptions of strategic models in relation to the level of information of reformers, the scope of partisan self–interest, and the level of control of the political elite over the process of electoral change.

An important part of the theoretical debate about electoral reform has taken place in the context of historical explanations for the shift from majoritarian to proportional systems of election in Western Europe at the dawn of the twentieth century.[17] The standard explanation, initially proposed by Lipset and Rokkan (1967) and Rokkan (2009 [1970]) and later generalized by Boix (1999), is that the shift occurred in a changing electoral arena as a result of the threat that emerging socialist parties posed to established parties when the latter were divided. But Rokkan also argued (2009 [1970]: 157) that in the case of early reformers, such as Denmark, Switzerland, and Belgium, the drive to reform was not the socialist threat but the desire to protect minorities in heterogeneous societies. Most studies on the adoption of PR have neglected the analysis of this alternative route.

According to Calvo (2009), Rokkan was right in identifying a different road to PR but wrong in proposing that it was the desire of established parties to protect minorities that led to reform in these cases. Rather, it was the established parties' strategic interest in reducing the vote–seat distortions that affected them when new parties entered the electoral arena due to the expansion of suffrage and when the territorial distribution of the vote was asymmetric (Calvo 2009: 256). Calvo finds evidence to support his argument in historical cases such as Belgium and Denmark but more generally claims that the alternative path may be fruitfully explored in all those countries where socialist parties never posed a serious threat to established elites.

One can extend the idea of alternative routes to strategic reform even further. It is apparent that outside Western Europe PR was adopted under historical conditions different from both the "socialist threat" *and* the partisan biases created by three-way competitions in majoritarian systems with an asymmetric distribution of the vote across districts. In many countries of Latin America PR was often adopted independently of the expansion of suffrage and in the absence of a rising new party, let alone one with a socialist ideology. For instance, in countries like Uruguay and Colombia, no significant third party existed before the adoption of PR. The reform occurred at a time when factional divisions within the dominant party enabled the opposition party to force a negotiation or pass the reform in alliance with the challenger faction.[18] Moreover, in some instances PR was adopted by dominant parties to fulfill pre-election commitments or by non-elected actors, such as the military, to crack the power of majoritarian populist parties.

Within the discussion about the origins of PR, some authors have argued that while politicians act strategically, they do not always make decisions under conditions of complete information. The "socialist threat" theory assumes that old parties had sufficient information to act preemptively, and shifted to PR to minimize their seat losses. But, as Andrews and Jackman (2005: 71) observe, this explanation discounts the role of uncertainty, which should have been significant in an electoral arena whose stability was affected by the expansion of suffrage. These authors claim that if we take uncertainty seriously, strategic politicians should have adopted PR only when the seats-to-votes ratio of the largest party decreased under a majoritarian system, regardless of whether the party was new or old, conservative or socialist. And they find historical evidence to support this claim (Andrews and Jackman 2005: 80–81).

Contemporary debates about electoral reform have also shown that while political elites may want to reform only if they expect to be better off under alternative rules, they are not always

able to do so. In certain situations, political elites may be forced to initiate an electoral reform in response to systemic failures induced by the existing electoral system. According to Shugart and Watterberg (Shugart 2001; Shugart and Watterberg 2001: 571–577), electoral systems that promote extreme forms of concentration of institutional power in the plurality party, party system fragmentation, personalization, or party centralization tend to create pathologies that result in systemic failures that force politicians to reform. This framework has been used to persuasively explain recent cases of the adoption of mixed systems in the 1990s in New Zealand, Italy, Japan, and Venezuela. In a similar vein, Sakamoto (1999), Negretto (2008), and Renwick (2011) emphasize that, contrary to the assumption of most strategic models, political elites do not always have full control over reform. This lack of control may occur because in a democratic context elites are subject to citizen demands and fear electoral retribution if they do not respond with reforms that satisfy the people or simply because reforms are sometimes pushed forward by citizen-initiated referendums, as was the case with the 1993 electoral reform in Italy.[19]

Electoral rules are distributive institutions par excellence. They determine how many actors can compete with some probability of success and who may win or lose given the expected popular vote in an election. From this perspective, it makes perfect sense to assume that professional politicians would attempt to reform the existing electoral system when it affects their partisan interests and, if they have sufficient power, choose those rules that they think would benefit them most. Proof that this basic analytic framework is realistic is that it has worked better than others to explain electoral reform in a wide variety of settings. The strategic model needs several adaptations, however. Comparative historical evidence suggests that various conditions may lead to the same outcome. In addition, some of the model's assumptions must be relaxed to account for electoral reform in different contexts. It is obvious that uncertainty often restricts information about what alternative system would benefit established parties, that politicians must sometimes respond to a performance crisis of the existing electoral system, and that the political elite do not always have full control over reform. The challenge for future research in this area is, of course, to show the existence of different routes to electoral reform while accommodating the explanation within a single analytical framework.

Causal links: triggering events, reform proposals, and electoral choice

A comprehensive theorization of electoral reform must specify the causal mechanisms and links that should be observed in qualitative case studies if all the assumptions and propositions of a theory are correct. Some of the existing explanations provide theory-derived propositions that are then tested in a statistical model without showing how qualitative evidence coming from cases included in the sample might deviate from the empirical implications of the theory. Different explanations propose specific causal chains of events. In general, however, almost all theories imply certain observations about (1) the nature of the event that triggers the reform, (2) the identity and interests of the actors proposing and adopting new rules, and (3) the approval process.

If it is true that the adoption of PR at the turn of the twentieth century was a preemptive strategy by established parties to avoid losing seats as new parties emerged, we should observe that new parties were indeed increasing their electoral support before the reform. Yet the Belgian Socialist Party was never in a position to win an election before the 1899 reform (Calvo 2009: 268). We should also observe that the reform proposal originates with the established elites. In Germany, however, it was a government of the left that adopted PR in 1919 (Andrews and Jackman 2005: 77). Moreover, it is implicit in the "socialist threat" theory that established parties had control over the process of reform. Yet in Switzerland PR was adopted by a 1918

referendum on a citizen–initiated proposal of constitutional reform sponsored by the Social Democrats (Lutz 2004).

Statistical evidence about the average or marginal effects of certain variables cannot substitute for a careful analysis of the implied causal links and mechanisms. Quantitative evidence should be complemented with qualitative historical evidence (Kreuser 2010). In–depth historical analysis, however, can also be ambiguous in specifying causal mechanisms. For instance, Lipset and Rokkan present the mechanisms leading to the adoption of PR in the "anti–socialist" route in two different ways. One version postulates a convergence of interests between incumbents and challengers: "the rising working class wanted to lower the threshold of representation to gain access to the legislature, and the most threatened of the old–established parties demanded PR to protect their positions against the new waves of mobilized voters under universal suffrage" (Lipset and Rokkan 1967: 32). But in a different rendering of the same cases, they emphasize the predominant interest of incumbents: "the decisive moves to lower the threshold of representation reflected divisions among the established *regime censitaire* parties rather than pressures from the new mass movements" (Lipset and Rokkan 1967: 34). Note that if the interests of established and new parties converged, we should observe a consensual process of reform in which both supported the adoption of PR. If, however, PR primarily served the interest of the threatened elite, we should expect old parties to be enthusiastic supporters of PR and challengers (who may expect to become the future majority) to be reluctant about the reform or against it. To be sure, it may be that some cases fit one description more than others.

The general point is that any theory on electoral reform should be as detailed as possible about its observational implications. If different paths to reform exist, it could be a very demanding task to accommodate them in a single analytical framework that at the same time provides for clear causal links and individual mechanisms. But there is no other way to make progress on a research agenda about institutional change that could make sense of both general trends and relevant historical outcomes.

Conclusions

Electoral rules are important political institutions not only because they may have a direct effect on party formats but also because of their potential impact on other relevant outcomes, such as electoral participation, coalition formation, congruence between the preferences of citizens and policy makers, government stability, and corruption, among others. The electoral rules that matter are obviously not just the electoral formula, district magnitude, or the assembly size. Rules of candidate selection and details of ballot design may affect crucial aspects of party organization, the behavior of party candidates in elections, and the decisions that party representatives in congress make. There is an important and growing literature on all these areas. Yet it is still the research agenda on the party system effects of electoral rules that contains the core contributions of electoral studies to the comparative analysis of political institutions.

There is no doubt that progress has been made by electoral studies in understanding how electoral systems work. Electoral scholars are also more aware than they were in the past of the conditional and interactive effects of electoral rules in relation to other institutions and non-institutional factors. However, as regards the old question about how electoral systems affect party systems, the theoretical development of key causal mechanisms is less well developed than the statistical techniques used to test precise but simplistic explanatory models. Many key conceptual problems remain obscure or unexplored, such as the influence of strategic politicians on the political activation of latent social cleavages, the process of party formation in response to both preexisting cleavages and the existing electoral rules, possible variation in the number of

dimensions of political conflict over time, and mutual causation processes between party system effects and electoral system change.

Studies on electoral reform have advanced our knowledge about the conditions under which electoral systems remain stable and the conditions under which they might change, thus putting into question the universal assumption of electoral stability. Yet a comprehensive analytic framework for understanding the frequency of electoral change in a variety of contexts has yet to be developed. Strategic models of electoral reform have provided valuable knowledge about the historical origins of electoral rules and the processes that lead to their replacement. These models must, however, account for the existence of diverse historical paths leading to similar reforms, and accommodate the fact that political elites face various levels of uncertainty over which rules are most beneficial to them, that under certain conditions they must address systemic failures produced by the electoral system, and that they do not always have perfect control over the process of choice.

The most important task ahead is to build a unified theoretical framework linking sociopolitical heterogeneity and electoral structures to the number of parties and the number of parties to the politicization of cleavages and electoral reform. This is the kind of theory suggested by a joint reading of Duverger and Rokkan, the two founders of electoral studies in contemporary political science. The task is demanding but not unlike the challenge facing institutional studies in general, where until now the analysis of the effects and maintenance of institutions has remained separated from the study of origins, in spite of the obvious interaction between the two processes.

Notes

1 I would like to thank Octavio Amorim Neto, Ernesto Calvo, Josep Colomer, Marcelo Escolar, and the editors of this Handbook for their comments on a previous version of this chapter.

2 Throughout this chapter I will use the term electoral parties to refer to the parties winning votes in an election and legislative parties to refer to the parties winning seats in parliament or congress. By number of parties I mean the "effective" number of parties calculated according to the Laakso–Taagepera formula (1979) unless otherwise indicated.

3 The effect need not be perfectly linear, however.

4 I concentrate here on presidential elections, the most obvious institution that might influence legislative elections. But other institutions have been proposed, such as universal suffrage, federalism, and assembly size (see Blais and Carty 1991).

5 As in the case of parties, the number of presidential candidates is usually calculated using the Laakso–Taagepera (1979) index.

6 As Lipset and Rokkan plainly state (1967: 30), "in most cases, it makes little sense to treat electoral systems as independent variables and party systems as dependent."

7 Only Powell (1982) specified this relation as additive.

8 On the different alternative measures of ethnic heterogeneity used in this literature, see Stoll (2008).

9 In fact, the number of politicized dimensions of conflict could be endogenous to both electoral structures and political competition. However, as Taagepera and Grofman point out (1985: 349), for a given number of political divisions in a country, widely different numbers of parties remain possible, so they do not stand in a circular relation to each other.

10 Note that this hypothesis may put into question a central proposition of Lipset and Rokkan's work, the "freezing" hypothesis or the idea that party systems reproduce for long periods of time the fundamental cleavage structures that initially shaped them.

11 In particular, the average effective number of electoral parties in Peru went from 4.07 when the average district magnitude was 6.92, to 3.64 when the average district magnitude increased to 120. Then in 2001 and 2006, the average effective number of electoral parties increased to 6.94, in spite of the fact that the average district magnitude decreased to 5.

12 Although Taagepera and Grofman focus on legislative parties, their argument applies even more strongly to electoral parties.

13 This is what happened in some cases when at the turn of the twentieth century a third party emerged in restrictive electoral systems. Either a re-equilibration occurred or political elites shifted to PR.

14 The cross-sectional database of Cox (1997) includes the 1985 election in Sweden, which took place under an electoral system created in 1970, along with the 1985 election in Honduras, which was the first election regulated by a new system. On the other hand, the longitudinal database of Golder (2005) includes elections in France from 1946 to 1997. Yet France had five different electoral systems during that period, some of which regulated only one (1946) or two (1951 and 1956) elections.

15 A similar argument is found in Arend Lijphart (1994: 52).

16 Understanding the conditions that make some electoral systems more unstable than others would also shed light on the problem of why some proposed reforms are adopted while others fail.

17 I will consider here only political explanations that while grounded in a historical context have the potential to be transformed into a general comparative framework of electoral reform. I leave aside non-political explanations, such as that of Cusack, Iversen, and Soskice (2007), which is based on specific economic conditions in the early development of labor markets.

18 See Buquet and Castellano Christy (1995: 114–119) on how factional divisions within the Colorado Party created the political situation that forced this party to negotiate the adoption of PR with the Blanco Party in 1917 in Uruguay, and Mazzuca and Robinson (2008: 313) for an analysis of the alliance between the challenger faction of the Conservative Party and the Liberals that made possible the introduction of PR in 1929 in Colombia.

19 The 1993 electoral reform in New Zealand was also approved in a popular referendum. However, different from Italy, where the referendum is available on popular demand, in New Zealand only the government initiates the referendum. See Sakamoto (1999: 424–425).

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