Context, Electoral Rules, and Party Systems

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Abstract

To address concerns over the applicability of the electoral system literature to new and developing democracies, we present a framework for understanding the interplay between electoral rules and social, economic, and political context. This framework emphasizes that context typically shapes what we call the "behavioral" linkage between electoral rules and outcomes; moreover, the longer the causal chain connecting electoral rules to outcomes, the greater the number of opportunities for context to exert an effect. We then situate recent literature within this framework. Scholarship from a wide range of authors indicates many different ways in which contextual factors ultimately shape the number of parties. However, perhaps the most important contribution of this literature is to indicate how context conditions the behavioral incentives initially generated by electoral rules, thus promoting or undermining political actors' propensity to behave strategically.

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SMD: single-member district

PR: proportional representation

INTRODUCTION

Work on the effects of electoral systems has a rich tradition. Dating back to John Stuart Mill in the mid-nineteenth century (Mill 1958 [1861]), scholars have discussed how electoral rules shape party systems. Especially since the early 1990s—and even more so since the Arab Spring—this work has grown increasingly relevant to constitutional engineers, as newly democratic systems have sought to use electoral institutions to promote their own development.

At the same time, questions naturally arise about whether generalizations concerning the effects of electoral rules, which reflect the experience of well-established democracies, apply to newly democratic systems. In many new democracies, social divisions fracture the polity; rule of law is only partially established; fraud corrupts numerous aspects of the electoral process; violence and intimidation of voters occur often; the informational environment is undeveloped; voters lack education and experience in evaluating parties and candidates; poverty creates incentives for politicians to buy votes rather than invest in public goods; and parties and party systems have shallow roots. It seems likely that these contextual factors mediate the impact of electoral rules on outcomes.

To address concerns over the applicability of the electoral system literature to new and developing democracies, we present a framework for understanding the interplay between electoral rules and social, economic, and political context. This framework emphasizes that context typically shapes what we call the "behavioral" linkage between electoral rules and outcomes; moreover, the longer the causal chain connecting electoral rules to outcomes, the greater the number of opportunities for context to exert an effect. We then situate recent literature within this framework. Scholarship from a wide range of authors indicates many different ways in which contextual factors ultimately shape the number of parties. However, perhaps the most important contribution of this literature is to indicate how context conditions the behavioral incentives initially generated by electoral rules—thus promoting or undermining political actors' propensity to behave strategically.

THE (LENGTHY) FIRST-ROUND DEVELOPMENT OF THE FIELD OF ELECTORAL SYSTEMS

Maurice Duverger kick-started the modern study of the consequences of election rules in his seminal *Political Parties* (1954). He proffered a "sociological law" that plurality single-member district (SMD) rules promote two-party systems, and also noted a pattern of multiparty politics in proportional representation (PR) systems.

As originally argued by Duverger, there are both mechanical and behavioral mechanisms linking electoral rules to the district-level number of parties. Electoral rules mechanically translate district votes into district seats using a precise formula that (absent coercive factors) involves no human discretion. In what Duverger calls the "psychological effect," anticipation of the mechanical effect within the district shapes the behavior of voters and elites. As a result of these mechanical and behavioral linkages, Duverger's logic predicts substantial differences in the number of parties under different electoral rules. "Restrictive" rules (most notably SMD rules but also sometimes high-threshold, low-district-magnitude PR), in which those who garner a small share of the vote win few to no seats, are most likely to promote strategic behavior: voters and elites concentrate their support on candidates who are truly competitive within the district. Candidates anticipate this behavior, and therefore those who expect to lose become less likely to run in elections. The combined behavior of voters, elites, and candidates reduces the number of candidates or parties winning votes within any given district in restrictive systems. In contrast, in "permissive" electoral systems (especially multi-member, low-threshold, high-district-magnitude PR), even parties that win relatively small numbers of votes can win seats. As a result, voters and

elites in permissive systems can be less concerned with wasting their support and therefore can engage in more "sincere" behavior, backing their top choice in the election.

Empirical work on electoral rules became increasingly systematic with Douglas Rae's *Political Consequences of Electoral Laws* (1967), which used quantitative, cross-national analysis to test the generalizability of Duverger's observations. Over the next 30 years a host of empirical studies, partly stimulated by specialized academic journals, explored the relationship between rules and party systems. Lijphart (1994) and his colleagues integrated much of this work in a replication of Rae's analysis that Shugart (2005, p. 31) calls the "pinnacle" of aggregate studies on the effects of electoral rules on the party system. At about the same time, other work—most notably Gary Cox's *Making Votes Count* (1997)—incorporated micro analysis of the effects of electoral rules on the motivations and consequences of individual choices into the more macro analysis of the relationship between rules and aggregate outcomes such as the number of parties.

As a result, scholars such as Powell (2004), Riker (1982), and Shugart (2005) could write of a "mature field" of political science work on electoral and party systems (Shugart 2005, pp. 29–30), with "core concerns" of the number of parties and disproportionality. Although a variety of features of electoral systems were explored, the field's most widely accepted generalizations distinguished the consequences of restrictive rules from the consequences of permissive rules. Restrictive rules (especially SMDs) were associated with two-party systems, greater vote-seat disproportionality, and frequent single-party majority governments. Permissive rules, in interaction with the number of cleavages—the only contextual feature given much attention at this stage in the development of the field—were associated with more parties, less disproportionality, and the absence of single-party governments.

BRINGING CONTEXT SYSTEMATICALLY INTO THE DISCUSSION

Despite many scholars' confidence in the maturity of the field of electoral studies, generalizations about the effects of electoral rules remained somewhat controversial. The frequent appearance of exceptions to the generalizations, especially in newer democracies, further sustained controversy, leading to unease among those who would advise constitution makers. These exceptions appeared not only in specific countries but also in aggregate cross-national studies as these were extended to include newer democracies. To make sense of these exceptions, scholarship has increasingly brought context into the conversation. We argue that by explaining how and when context interacts with electoral rules, new work can both move the field forward and systematically address the concerns of constitutional engineers.

By context, we mean anything external to the electoral rule itself. We group contextual factors into two broad categories: coercive and noncoercive. Coercive contextual factors involve blatant political interference that prevents rules from working as anticipated, thus limiting the extent to which the formal institutions are the real rules of the game. Examples include election fraud and the use of violence and intimidation to subvert electoral outcomes. Coercive contextual factors play a relatively small role in most established democracies, but their influence can be extensive where democracy is less consolidated. Noncoercive factors involve features that do not directly impede the mechanical functioning of the electoral rules. Examples include the length of time the country has been a democracy, as well as social diversity, general economic and social development, and other institutions.

¹See, e.g., Clark & Golder (2006, pp. 700–702). Also see the review and analysis of election rules and party systems in Latin America by Morgenstern & Vásquez-D'Elía (2007).

There is good reason to expect two features of the causal chain linking electoral institutions and outcomes to shape the mediating effects of contextual factors. Both the type of linkages and the length of the causal chain linking electoral institutions and outcomes shape the mediating effects of contextual factors. First, following a tradition dating back to Duverger, we distinguish between mechanical and behavioral types of causal linkages. Mechanical linkages flow directly from rules, independent of human decision making: given a set of inputs, the rules produce outputs by means of a mathematical algorithm. In contrast, behavioral mechanisms reflect discretionary human action. People interpret and respond to a rule, filtering it through their perceptions, beliefs, capabilities, and cost-benefit calculus (including anticipation of mechanical effects). Because people respond in ways shaped by their environment, that context ought to shape the outcomes of electoral rules more systematically when the link between the institution and the outcome involves human discretion. Put differently, by shaping individuals' frames of reference, preferences, and abilities, contextual factors are critical to how people view their incentives—and, thus, contextual factors promote particular behaviors.

Second, the length of the causal chain ought to be significant (Rae 1967, Scheiner 2008). A particular outcome may flow immediately from an electoral rule or it may be distantly related. In the former (proximate) category are outcomes such as disproportionality and malapportionment. In the latter (distal) category are outcomes such as the size of the national party system, the stability of parliamentary governments, the accountability of governments to electorates, and the ideological representation of the electorate in government (Ferree et al. 2013b). Electoral rules do, to some extent, affect distal outcomes, but because there are many links—especially behavioral ones—in the chain, there are more opportunities for context to affect outcomes. **Figure 1** illustrates both expectations.

Noncoercive contextual factors mediate behavioral mechanisms but not mechanical ones, whereas coercive contextual factors can mediate both kinds of mechanisms. For graphical clarity, we indicate the impact of coercive contextual factors on the mechanical and behavioral links only

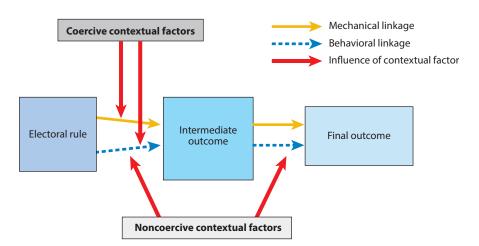


Figure 1

Mechanical, behavioral, and contextual effects. Variables (independent, mediating, dependent) are in boxes. Causal mechanisms are represented by arrows that are thin and solid for mechanical links or dashed for behavioral links. Thick red arrows indicate the impact of contextual variables. The electoral rule is our primary independent variable and can be linked to outcomes through mechanical or behavioral causal mechanisms. From Ferree et al. (2013b) with permission.

between rules and intermediate outcomes, but coercion can affect any of the light solid or dashed lines anywhere in the figure. We allow for rules to shape final outcomes through intermediate outcomes. The longer the causal chain and the more it is composed of behavioral linkages, the more likely that noncoercive contextual factors will shape the outcomes of the rules, leading to significant variation across cases and no one-size-fits-all relationship between rules and outcomes. The recent literature clarifies how context conditions behavioral mechanisms in each stage of the process by influencing political actors' strategic incentives.

FPTP: first-past-the-post

DISPROPORTIONALITY

Let us begin with disproportionality, an outcome shaped primarily by a direct and mechanical linkage from electoral rules, which therefore offers little opportunity for contextual factors to shape it.

Disproportionality represents the degree to which the share of seats allocated to parties matches the share of votes that they win. In disproportional systems, at least one party wins a larger share of seats than votes. For example, at the district level in a SMD plurality (first-past-the-post or FPTP) system, the largest party always wins 100% of the seats, and all other contestants win 0%. As a result, whenever there is more than one contestant winning a significant number of votes, there is high disproportionality at the district level in FPTP systems. At the national level, disproportionality is usually reduced somewhat because parties that win in some districts lose in others. That is, the disproportionality in the national party system depends on a mechanical factor—the balancing out of district-level effects across the country. For discussion and an example of how a small vote shift can greatly alter national vote-seat disproportionality in FPTP depending on the extent of this balancing out or "cancellation" effect, see Powell & Vanberg (2000, pp. 392-93), who also observe the relationship between disproportionality and partisan gerrymandering, and Taagepera & Shugart (1989, pp. 109-10). In contrast, under electoral rules in which there are many seats in a district and there is no minimum number of votes needed for a party to gain seats, parties tend to win roughly the same share of seats as they do votes—that is, disproportionality is low at the district level, and the balancing-out (or cancellation) effects are less relevant.

We should note that our discussion and most notions of the effects of electoral rules on disproportionality are conditional on a given distribution of votes. As laid out in Taagepera & Shugart's (1989, p. 123) Law of Conservation of Disproportionality, as well as in the work of Cox (1997, ch. 9) and Lijphart (1994, p. 97), the anticipation of disproportionality (or lack thereof) may influence the initial distribution of votes, which in turn alters disproportionality in a given election. Under restrictive rules such as FPTP, voters and/or elites may defect from their first party preference and vote for a larger party that has a better chance of winning. By reducing the number of votes going to parties that win few seats, such strategic behavior reduces disproportionality. As Moser & Scheiner (2012, ch. 3) point out, the opposite is also true: a lack of such strategic behavior is apt to actually increase disproportionality.

Disproportionality as usually measured is an example of an outcome that is connected to an electoral rule through a short causal chain and largely mechanical effect. Because the link is mechanical, noncoercive contextual factors have a limited mediating impact on how electoral rules shape disproportionality: conditional on a particular distribution of votes and barring coercive efforts to manipulate outcomes, electoral rules should have the same effect on disproportionality everywhere. Indeed, Shugart (2005) and Taagepera (2007) argue that there is consensus among scholars on the universally deterministic effect of electoral rules, irrespective of context, on the translation of votes into seats.

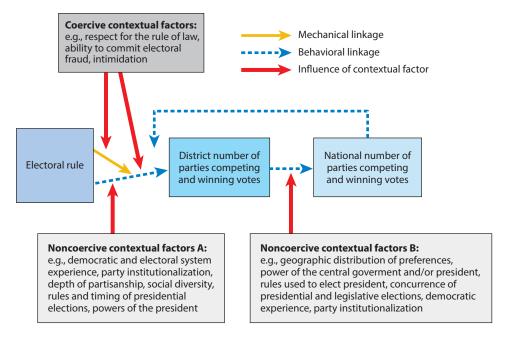


Figure 2

Context and electoral rules interact in two stages to shape the number of parties in the national party system. From Ferree et al. (2013b) with permission.

NUMBERS OF PARTIES IN LEGISLATIVE ELECTIONS: THE DISTRICT LEVEL

The most longstanding line of research in the electoral system literature has followed how rules shape the number of parties. It is on the role of context in this relationship that new literature may be making its most significant mark.

As **Figure 2** illustrates, the first step in the chain linking rules to the composition of the national legislature takes place at the district level. Since Duverger wrote, numerous researchers have sought to explain the number of national parties, but the logic underpinning most analysis applies to the district level. Indeed, although the original formulation of Duverger's Law was cast in terms of the effects of electoral rules on the national party system, Duverger (1954, p. 223) himself also highlighted that the "true effect" of FPTP leads to two parties at the district ("constituency") level.

The expectation of Duverger's Law is therefore that (restrictive) FPTP rules ultimately lead to only two viable candidates per district, whereas systems with permissive electoral rules allow (perhaps even encourage) more than two viable parties per district. (To be more accurate, the second half of this statement, pertaining to less restrictive systems, is referred to as "Duverger's Hypothesis.") In the most systematic discussion of the foundations of Duverger's Law, Cox (1997) synthesizes the logic underpinning these outcomes and identifies the common pattern across them: the M+1 rule, whereby the number of parties or candidates in a district is capped at the district magnitude (M) plus one. FPTP systems have a district magnitude of one, so they can, according to the theory, support at most two parties. Permissive systems with higher district magnitudes can support many more parties.

Contextual factors shape the effects of electoral rules on the number of parties at the district level by (a) narrowing the set of choices available to political actors and (b) conditioning political

actors' incentives to engage in strategic Duvergerian behavior. In the following sections, we discuss both of these pathways. We then consider how context shapes candidate entry, the role of other institutions as contextual variables, and coercive contextual factors.

Context and the Number of Parties: Narrowing the Options

By narrowing the set of realistic behavioral options for political actors, contextual factors reduce the indeterminacy of (especially highly permissive) electoral rule effects. As argued by Cox (1997), electoral rules cap the number of viable contestants for a district. When this cap is high, the rules exert few constraints on the number of parties, allowing contextual factors to play an important role in shaping how many contestants enter and win votes.

For example, South Africa uses a national-list PR system in which half of the 400 parliamentary seats are drawn from a single national list and the other half are drawn from nine provincial lists. Voters cast a single national vote, and votes are allocated to seats from a single national district of 400. Applying the M+1 rule to the national district implies that, at most, 401 parties will form. Obviously, this does little to narrow our expectations or to differentiate between the likely number of parties under such a system and one with a district magnitude of, say, 100. Indeed, in practice, approximately seven parties win votes in South African elections, with one party, the African National Congress (ANC), taking almost two-thirds of the vote. The rules cannot explain why seven and not four—or even 401!—parties win votes. And the rules do not provide insight into the relative dominance of the ANC.

To explain the South African party system, we need to consider how social, historical, and political context narrows the set of party options and thus constrains the plausible electoral behavior of political entrepreneurs, candidates, and voters. This context includes the significance of race in shaping voting behavior after 40 years of apartheid and several centuries of segregation; the success of the ANC in becoming a focal point for antiapartheid forces; the strategic use of resources by the ANC to prevent opponents from making inroads into its constituency; and the ANC's success at cauterizing splinters within its coalition (Ferree 2011). Moreover, this outcome is not unique to South Africa. In the 1997 Liberian election that followed a civil war, the highly proportional, high-district-magnitude, single-nationwide-district electoral system nevertheless gave warlord Charles Taylor a landslide victory in the legislature and an equally large win in the presidential race, an outcome Mozaffar (2010, p. 92) attributes to "fear-induced voting." The system might have supported many parties, but voters feared a vote for anyone other than Charles Taylor would expose them to retribution.

Indeed, a large number of contextual factors influence the development of parties. In a systematic, cross-national analysis of when new social groups are able to form sectarian political parties, Stoll (2013) identifies several of these contextual factors. Characteristics of the groups themselves are critical: larger groups are more likely to be able to form their own successful parties, as are groups with the capacity for collective action and groups based on "sticky" attributes (such as ethnicity) that more permanently bind members. Stoll also suggests that strategic behavior by existing parties can blunt the efforts of new groups to develop new parties (see also Hug 2001 and Meguid 2008). In short, large numbers of parties are likely to emerge only under certain conditions, even under permissive electoral rules.

This first contextual effect—the narrowing of the number of parties—is consistent with, but helps to clarify, the emergent Duvergerian view within political science that has held that social context interacts in specific ways with electoral rules to shape the number of parties. Duverger himself emphasized the importance of "aspects of the life of the nation such as ideologies and particularly the socio-economic structure" as "the most decisive influences" shaping the party system

(1954, p. 205). For Duverger, electoral rules were only facilitating or hindering factors (Clark & Golder 2006). Because political actors can more often engage safely in sincere electoral behavior under permissive rules, social and political divisions are more likely to become expressed through distinct parties under such rules, thus promoting a link between the number of divisions and the number of parties. Taagepera & Shugart (1989), for example, show a relationship between the estimated number of issue cleavages and the number of parties in permissive electoral systems. Amorim Neto & Cox (1997) and Ordeshook & Shvetsova (1994) use nationally aggregated measures of social (especially ethnic) diversity and the number of parties to demonstrate this interactive relationship between diversity and electoral rules in shaping party fragmentation. Using similar data, Clark & Golder (2006) sharpen the theoretical and empirical analysis to demonstrate the interaction more convincingly (although they find no evidence of the relationship when they include the newer democracies in the analysis). Singer & Stephenson (2009) address the mechanisms more effectively by conducting analysis similar to Clark & Golder's but instead use district-level measures of the number of parties. And even in emphasizing the significance of contextual factors, Stoll (2013) indicates the importance of electoral rules and their interaction with context, since small groups can only form their own sectarian parties in permissive systems.

Failure of Voter Coordination: Preferences and Capacity

New work increasingly challenges the dominant view of Duvergerian processes by examining contextual factors that promote or alter the incentives initiated by electoral rules for strategic behavior underlying the M+1 rule. Cox (1997, pp. 76–80) specifies a set of conditions that are necessary to secure the emergence of Duvergerian voting equilibria under FPTP rules. The mechanical linkage from restrictive rules generates behavioral incentives for voters, but contextual factors related to voters' preference to cast ballots strategically and their ability to do so condition those behavioral incentives. In contexts where all of Cox's conditions hold, voters have strong incentives to behave as expected by Duverger, leading to no more than M+1 (viable) contestants. However, literature in recent years has turned increasingly to the other side of the coin: in contexts in which any of Cox's conditions fails to hold, many voters will view the incentives generated by the mechanical linkage differently and choose to behave in ways that produce more than M+1 viable contestants.

Cox discusses two conditions related to voter preferences that are necessary for voters to gain an incentive for the strategic behavior necessary for Duvergerian equilibria. Voters will choose to strategically shift their support away from their top choice—assuming that choice is not competitive—only when they prefer one of the leading competitors over the others, and thus are willing to vote for the "lesser of two evils." Also, voters will vote strategically only when they have a preference to shape the electoral outcome of the current election.

Recent literature has given attention to contexts that violate these conditions and eliminate incentives to cast strategic ballots. First, voters who are indifferent between the leading party/candidate alternatives—that is, the top two candidates in FPTP systems—are unlikely to defect from their first-choice party even if it has little chance of winning (Cox 1997, p. 76). Voters may understand that their first choice is a likely loser, but because they do not care which of the lead parties wins, they have no incentive to weigh in on the contest between them. Hence, they stick with their sincere top choice. When many voters cast sincere ballots in this way, they fail to concentrate their support on the front-runners, and more than M+1 parties may win substantial support. Cox (1997, p. 76) suggests that voter indifference with respect to other alternatives may correlate with the strength of voters' electoral attachments, which, in turn, relates to several contextual factors, such as ethnicity and ideological commitments.

Moreover, voters who are not short-term, instrumentally rational will have no incentive to cast strategic ballots that shape the outcome of the current race. As Cox points out, some voters "take a long-term, albeit still instrumental, viewpoint...and seek to affect the outcome of future elections by demonstrating stubbornness in this election" (1997, p. 77). For example, in some contexts, voters may be especially likely to cast ballots that express their sense of identity—whether it be partisan, ethnic, religious, class, or other forms of identity—and therefore unlikely to engage in instrumental (i.e., election-determining) behavior. The Duvergerian logic may therefore fail to hold in countries where identities rigidly shape attachments to parties. Indeed, recent empirical literature reveals frequent exceptions to Duvergerian logic under FPTP rules in socially diverse contexts. Using SMD-level measures of all key variables, Ferree et al. (2013a), Moser & Scheiner (2012), and Moser et al. (2011) each demonstrate a strong relationship between social (especially ethnic) diversity and the number of parties under FPTP rules. Similarly, in his district-level analysis of SMD systems, Singer (2013) also finds a positive relationship between ethnic diversity measured at the national level and the success of candidates ranked in fourth place and worse in the district.

These findings run counter to previous work that suggested an interactive relationship between social diversity and electoral rules—with restrictive rules acting as a brake on the effects of social context. Instead, the new work indicates that context can shape the party system independently of the electoral system. These studies are also consistent with work on voting behavior that finds that, at most, only roughly half of all voters with an opportunity to cast strategic ballots choose to do so (see, e.g., Alvarez et al. 2006).

Given the apparent links between social diversity and party fragmentation, it seems that strong party/group allegiance is a key to promoting a lack of strategic behavior, but the mechanism remains unclear in the literature. Do voters stick to their first preference because they approve of it intensely and are indifferent to other alternatives (the first contextual condition discussed above)? Do they do so because they are less concerned with victory in their district in the current election (short-term instrumental rationality)?

In addition, context may promote other types of preferences that can undercut incentives to cast strategic ballots that promote Duvergerian equilibria. In Senegal, for example, voters value the preservation of community solidarity and consensus, and they fear potential conflict generated by elections (Schaffer 1998). Seeking to avoid discord, many Senegalese voters prioritize voting the same way as other members of their community over strategic concentration of votes on a potential winner. To be sure, such voters may behave in a short-term instrumentally rational fashion, but the instrumental aim is not the electoral victory of a preferred party or candidate but the preservation of community consensus. Voters play "a different game with different aims and rules" (Schaffer 1998, p. 115), which reduces the desire to cast strategic ballots to "make votes count."

Cox (1997) further highlights that the informational context—which relates to voters' *ability* to behave strategically—is also critical to the development and maintenance of Duvergerian equilibria. Voters must have substantial information about the relative likelihood of success of different contestants but not know the winner of the election with certainty. Only when voters know if their preferred party is in or out of the running, are aware of which alternatives are viable, and have an option so that shifting their vote strategically may change the outcome of the race will voters have strong incentive to alter their behavior away from supporting their top choice. Here, too, recent literature indicates how behavior shifts away from the expectations of Duverger in contexts that violate these conditions.

Perhaps the factor that stands out the most is the extent of democratic experience. In newer democracies, there may be significant uncertainty about likely political outcomes. Crisp et al. (2012) find a tendency toward many more wasted votes and less apparent voter coordination under

two conditions common to new democracies: many new parties and significant vote volatility from election to election. New democracies typically lack a long history of prior election results from which voters and elites can draw inferences about likely election outcomes (Cox 1997, p. 78). They may also have rudimentary polling resources and limited media (especially if they are not only new at democracy but also lack economic resources), further constraining the ability of voters and elites to arrive at a common ranking of parties.

Voters in new democracies may therefore be less likely to cast strategic ballots. Tavits & Annus (2006), for example, find a particularly large number of wasted votes (measured as the number of votes going to candidates who do not win a seat)—an indication that voters are not engaging in widespread strategic coordination—in the initial ("founding") elections in new democracies. Tavits & Annus also find that the number of wasted votes declines as countries gain experience with democratic elections, thus suggesting an increase in strategic voting over time. Similarly, Ignacio et al. (2012) show that the number of wasted votes is especially great in founding elections in newly democratic countries that had no previous democratic experience—a context in which it is particularly difficult to gain reliable information about the political system and distributions of party support.

Forming common knowledge of the ranking of parties may be especially problematic in poorly institutionalized party systems in which electoral volatility is high and/or there are large numbers of independent candidates. In fact, plurality races in new democracies, especially those with poorly institutionalized party systems, often involve relatively little strategic defection from weak candidates and, in turn, produce a large numbers of parties (Filippov et al. 1999, Moser 1999, Grofman et al. 2009, Moser & Scheiner 2012). At the same time, the problem of wasted votes and a lack of strategic voting is present in all countries that introduce new electoral systems. Moser & Scheiner (2012, ch. 4), controlling for other factors such as democratic experience, find that the number of parties under FPTP rules within mixed-member electoral systems (which use both SMD and PR rules in a single system) is at its highest in the first election under the system, and then, on average, drops sharply over the next two elections—leading to "effective number of electoral parties" scores at the district level that drop nearly half a point from the first election under the system to the third. Looking across an array of different electoral systems in both new and established democracies, Crisp et al. (2012) find a similar pattern, with wasted votes declining and apparent voter coordination increasing after the initial election under new electoral rules.

In addition to democratic electoral experience and party institutionalization, general cultural factors such as distrust of the media may impinge on voters' ability to gain accurate information about elections, and therefore make it unlikely that they will shift their support away from their most preferred choice. Horowitz & Long (2012) discuss the case of the 2007 election in Kenya. The presidential election featured three leading candidates: Kalonzo Musyoka, Raila Odinga, and Mwai Kibaki. Although polls consistently showed Musyoka a very distant third in the presidential race, his Kamba coethnics continued to support him in large numbers. Kamba behavior cannot be explained by poor information because polling companies conducted 40 highly publicized nationally representative surveys in the campaign period. Horowitz & Long speculate that ethnic attachments among the Kamba created perceptual biases that undermined the formation of reasonable beliefs about the electability of their candidate and thus prevented Duvergerian coordination. Thus, it is not only the availability of information but also the perceived trustworthiness of that information that shapes voters' ability to act strategically.

Environments that lack information, then, alter the incentives voters have to behave strategically by hindering their ability to coordinate. But, ironically, too much certainty about likely outcomes—in particular, about the likely winner—also creates a disincentive for voters to behave strategically and defect from their top choice. Riker's (1976) work on the Congress Party in India

during the early years of the country's independence provides an example. Congress occupied the center of the political spectrum, bracketed by more ideologically extreme smaller parties to the right and left. A coalition of these small parties was ideologically infeasible, and voters on either end of the political spectrum had no anti-Congress party alternative to which they might switch their vote strategically. As a result, Congress won with near certainty. Because of Congress' dominance, voters who preferred one of the smaller parties had no reason to abandon their top choice, so several small marginal parties continued to win support despite FPTP rules. The literature on Mexican politics further buttresses this theoretical point (Greene 2007, Magaloni 2006): Mexico's Institutional Revolutionary Party (PRI) used ideological centrism, combined with clientelism and selective electoral fraud, to remain for many decades a Condorcet winner, flanked on both sides by two smaller opposition parties that failed to coordinate.

Failures of Candidate Entry Coordination

Of course, rules and context affect not only voters but parties and candidates as well. Candidates may—as Cox suggests—be more responsive to strategic considerations than voters are. By strategically withdrawing and concentrating resources on a small number of candidacies or by colluding to prevent superfluous candidacies from occurring in the first place, candidates and parties may preemptively winnow down the number of choices available to voters (Cox 1997). With only two options before them, voters can be expressive and uninformed and Duverger's Law will still hold. However, candidate coordination depends critically on human behavior and decision making, thus allowing contextual factors to also impede the strategic coordination of candidate entry.

Contextual factors can affect candidate behavior indirectly, through voters. As discussed above, context may be significant here by shaping voter preferences, which in turn may shape candidate entry. For example, Dickson & Scheve (2010) provide a model of candidate entry founded on the assumption that citizens will always seek to further the electoral performance of their group: in equilibrium, at least one candidate from each group will run, and voters will support the party of their own group, even if that party is likely to lose. The model suggests that societies with total homogeneity or substantial heterogeneity are likely—for Duvergerian reasons—to develop two-party systems. But Dickson & Scheve's analysis also suggests that the presence of one large group and one smaller one, just under half the size of the larger group, will be apt to lead to three viable contestants, since the larger group could run two candidates/parties and still not seriously risk losing to the contestant put up by the smaller group. Drawing from a cross-national dataset of presidential elections in the 1990s, Dickson & Scheve find significant support for this relationship between social diversity and the effective number of (presidential) candidates competing in de facto national SMD races.

Contextual factors can also exert a direct effect on candidate entry. Just as was the case for voters, the *ability* to act strategically shapes the behavior of candidates. Candidates who know that they are likely losers (and also know which competitors are likely to be strong) will be apt to withdraw from competition or not run in the first place. However, where information is limited and candidates and parties cannot reliably estimate their own chances of success, party proliferation is likely. For example, Moser (2001) and Moser & Scheiner (2012) discuss the 1995 election in Russia, which used a mixed-member system with a 5% legal threshold in the PR tier. With great uncertainty in only the second election in the democratizing country, a wave of parties entered the race despite the 5% threshold: 43 parties in all competed in the PR tier, with only four gaining representation and 50% of the vote being cast for parties that did not gain seats (Moser & Scheiner 2012, p. 94, fn. 4). Moreover, where no legal threshold of representation exists in a context of such uncertainty, the wave of candidate/party entry builds on itself: if there is little strategic defection,

many candidates may receive votes, thus bringing down the vote share needed for victory. More candidates are encouraged to run because, in theory, anyone has a chance.

In contexts where politicians are motivated by the distribution of rents rather than a desire to influence policy, candidates may not run to win the election but to demonstrate support within a community and influence postelection bargaining over the allocation of spoils (Mozaffar & Scarritt 2005). Indeed, incumbents may exploit such situations by using access to rents to divide and conquer the opposition. Candidates then have strong incentives to stay in the race, even if they are unlikely to win, especially if they believe their voters will not strategically desert them.

Furthermore, coordination at the elite level often depends on compromise and collusion and may require elites to solve a difficult time-inconsistency problem. For example, in his discussion of opposition coalition building in Africa, Arriola (2012) argues that opposition politicians must agree to a division of the spoils of office before an election, nominating one of their members to run as the presidential candidate and promising the others cabinet posts. As such promises tend to lack credibility (the candidate who becomes president can renege with few penalties), coalitions frequently fail. One solution to the time-inconsistency problem involves a "pecuniary" strategy of upfront financial transfers from the running candidate to the other candidates. However, because opposition candidates lack access to state resources and their constituent bases are often poor, pecuniary strategies become viable only when oppositions can raise funds from the private sector. Moreover, where the incumbent controls access to capital, he can threaten retribution against private firms that fund opposition candidates and thereby foil opposition coordination. Hence, in contexts where financial resources remain concentrated in the hands of dominant parties, oppositions may remain fractured—even if electoral institutions provide incentives to coalesce. The lack of encompassing organizational structures, such as trade unions and civil society groups, may similarly hamper elite coordination. LeBas (2011) argues, for example, that Kenya's fractionalized party system persists despite FPTP rules because authoritarian leaders in the postcolonial period intentionally "flattened" the organizational landscape by banning encompassing institutions like national trade unions, making it more difficult for parties to bridge ethnic niches. These examples reveal that incumbents sometimes follow explicit strategies of "dis-coordination" of the opposition. When elites fail to coordinate, the number of candidates competing in races is more likely to exceed predictions based on Duverger's logic, and institutional theories are less likely to hold.

Other Institutions as Contextual Factors

Other institutions—most notably those related to presidential elections—may also condition voters', elites', and candidates' incentives, thus shaping their propensity to behave strategically in legislative elections. On one level, presidential elections held concurrently with legislative elections exert a constraining effect within permissive electoral systems similar to those that we described above: permissive electoral systems make it possible for many parties to gain representation, but the concurrent presidential election helps narrow the set of most plausible party options. Presidential elections provide voters with an informational shortcut about viable parties in legislative elections and also encourage voters to support legislative candidates who maintain a link to a candidate in the presidential race. In this way, the presidential race may push voters who would otherwise cast sincere ballots under the permissive rules to concentrate their votes on candidates from parties with front-runners in the presidential race. Anticipating this consolidation, some candidates (presumably those without major party endorsements) may opt not to run. Indeed, in an analysis of 595 elections in 66 countries, Hicken & Stoll (2011) demonstrate that the mean district-level effective number of parties in a country's legislative elections under permissive rules tends to be particularly low in elections in which few candidates run concurrently in the presidential race.

Multi-candidate presidential elections, on the other hand, may promote non-Duvergerian equilibria in restrictive electoral systems. Singer's (2013) district-level analysis of nearly 7,000 SMD contests in 53 countries indicates that there tend to be significantly more than two viable candidates per district in systems that elect presidents through a two-round majority system (a rule that tends to promote multiple candidacies). Singer's findings suggest that "the presence of multiple contenders for the presidency may raise awareness of multiple parties and encourage candidates to run under their banner, creating coat-tails even in SMDs that increase legislative fragmentation" (2013, p. 206).

Nevertheless, questions remain about the mechanisms that underpin these results. Singer's analysis does not control for the number of candidates running in the presidential race, so it is unclear whether his findings with respect to two-round majority systems are a result of presidential electoral institutions or something else. Moreover, for both Hicken & Stoll's and Singer's findings, it remains unclear whether the outcomes are due to the behavior of elites, candidates, voters, or all three.

Finally, political centralization—whether national versus local power or the concentration of power within the national government—may also shape political actors' willingness to behave strategically. Despite working within a highly permissive closed-list PR electoral system, the importance of ganing a majority of seats (even with a coalition government) in Israel's parliamentary system has typically provided some incentive to coalesce around larger parties that might control the government. However, Stoll (2013) notes that with the (temporary) introduction of a directly (voter) elected prime minister in the 1990s—which concentrated greater power than before in the office of the prime minister—it became less important for Israeli parties to win the largest share of legislative seats, and there was, in turn, an uptick in small, sectarian party success.

Coercive Contextual Factors and Incentives to Behave Strategically

We have focused on the effect of noncoercive contextual factors on behavioral incentives, but coercive factors may be at least as potent. Substantial recent work in political science has examined electoral fraud, clientelism, voter and candidate intimidation, and electoral violence. Although most of this work does not explicitly consider the intersection between coercive factors and electoral rules, we believe this intersection is important to future work on the role of context in shaping institutional effects. We therefore sketch some implications of coercive factors for strategic behavior on the part of voters and candidates.

Electoral fraud is a broad set of strategies that includes manipulating voter registries, violating ballot secrecy, ballot stuffing or burning, altering tallies at either the decentralized voting-station level or the centralized counting level (for overviews, see Schedler 2002, Lehoucq 2003, Alvarez et al. 2008, Birch 2012). Such strategies may be used to create an "aura of invincibility" around the incumbent, which may discourage strategic coordination of opposition candidates and their supporters (Magaloni 2006, Greene 2007, Simpser 2013). Similar to the logic of the Condorcet winner discussed above, if opposition voters believe with high certainty that the incumbent will win, they have little incentive to defect from their preferred (but losing) candidate. Particular types of electoral fraud—e.g., violations of ballot secrecy—may also facilitate electoral strategies such as voter intimidation and vote buying (Cox & Kousser 1981, Schaffer 1998, van Dijk 2000, Stokes 2005, Kitschelt & Wilkinson 2007, Schaffer & Schedler 2007), which may in turn reduce incentives for voters to behave in a strictly Duvergerian fashion. Along similar lines, in postconflict elections, "concerns for safety are more immediate rational considerations than the strategic response to the incentives of electoral rules" (Mozaffar 2010, p. 86). Related concerns of course also emerge in contexts with a high likelihood of violence: whatever small probability voters have of tilting

the election result in the direction of a preferred candidate may be outweighed by the risk they perceive to voting against the wishes of an intimidating agent. Promised a reward or threatened with punishment for supporting particular candidates, voters may abandon the strategic logic required for electoral rules to have their expected effects. This may result in a party system far smaller than permitted by the rules (a narrowing effect) if the intimidating agent is the ruling party, or it may lead to violations of the M+1 rule if the intimidating agent is a trailing party.

Coercive contextual factors shape not only voter behavior but also candidate behavior. Candidate intimidation is routine and extreme in elections in Zimbabwe (Makumba 2002), for example, and occurs in other countries as well (Schedler 2002). However, most candidate intimidation has the goal of reducing the number of candidates entering elections, and does not, therefore, lead to violations of M+1 expectations. Rather, it may be added to the set of factors that winnow down the number of candidates below the M+1 ceiling. In Zimbabwe's case, the goal of candidate intimidation is to ensure that voters face only one choice: a candidate from Robert Mugabe's ruling party, the Zimbabwe African National Union (ZANU) (Makumba 2002). The field would benefit greatly from work that focuses more thoroughly on the mediating effect of coercive contextual factors on voter, elite, and candidate electoral behavior.

PROJECTION TO THE NATIONAL LEVEL

Although Duvergerian theory focuses principally on effects of electoral rules on district-level party competition, scholars and constitutional designers are usually more concerned with shaping the composition of the national legislature. The district effects are but intermediate steps in the chain linking electoral rules to the number of parties at the national level (see **Figure 2**). In an additional step, voters and elites in each district decide—usually through the coordinating efforts of a nationally centralized organization—whether to join with voters and elites in other districts in support of a slate of candidates. When this coordination is successful, the district-level party systems become nationalized and the district-level number of parties becomes "projected" onto the national level. The number of parties represented in the national legislature is therefore in part a result of the extent to which the different district-level parties aggregate across the country.

Ideally, a measure of the number of parties will give greater weight to those that are genuinely viable. For this reason, the most common measure is Laakso & Taagepera's (1979) "effective" number of parties (ENP) index, which weights parties by the percentage of votes or seats they won.² Most of our discussion focuses on the effective number of electoral parties (i.e., those receiving votes in elections), not the effective number of legislative parties (i.e., those winning seats): the distribution of votes cast for different parties precedes parties winning seats, and the conversion of votes into seats is a mechanical process not affected by noncoercive contextual factors.

The projection from the district number of parties to the number across the country depends on human discretion—that is, whether political actors in different districts coordinate with one another—thus adding another point at which contextual factors can shape the outcome. Perhaps most obviously, the geographic distribution of preferences affects the extent to which the national party system matches the district-level party systems. For example, in countries such as Canada where a national minority group makes up a large percentage of the population in particular

²ENP is calculated by squaring the proportion of the vote or seat shares of each party, adding the squares together, and then dividing 1 by this total: $N_v = 1/\Sigma(v_i^2)$ or $N_s = 1/\Sigma(s_i^2)$, where N_v is the effective number of electoral parties (i.e., parties winning votes) and N_s is the effective number of legislative parties (i.e., parties winning seats). See Laakso & Taagepera (1979), Lijphart (1994, pp. 57–72), and Taagepera & Shugart (1989, pp. 77–81, 104–105).

regions, the group can help a national third party win seats in those regions. Indeed, in recent Canadian elections, the (effective) number of candidates per district has been roughly 2.8, but the nationally aggregated effective number of parties has been closer to 3.8. Under FPTP rules, therefore, there may be two candidates per district, but more than two parties winning seats nationally (Rae 1967, p. 94; Riker 1982; Norris 2004).

As with the district-level behavioral effect, democratic experience and party institutionalization shape whether electoral rules have their expected effect on the number of parties. Where parties do not have strong ties to voters, it becomes markedly more difficult to coordinate political actors across districts. Moser & Scheiner (2012, ch. 4) indicate that in such cases there is less projection from the district to the national level, which ought to lead to more than two national parties even under FPTP systems. In mixed-member systems in established democracies, the mean difference (after controlling for other factors) between the effective number of parties aggregated at the national level and the mean effective number of candidates for all the individual SMDs in a given country is 0.27, suggesting almost perfect projection. In contrast, the mean difference in mixed systems in new democracies is 1.66, indicating far less nationalization of the party vote in SMDs in such countries.

As with the district-level behavioral effect, nonlegislative institutions shape the projection of the number of parties from the district-level to the national-level party system. When presidential and legislative elections coincide, the presence of a plurality-elected president can make coordination across districts more likely. Political actors in different districts have greater incentives to work together in order to elect the president whom they most prefer (or who is at least the lesser of two evils) (Cox 1997), thus also creating a foundation for coordination among potential partners within legislative parties. Moreover, just as was the case for the district-level behavioral effect, projection is not a direct result of the electoral rule to elect the president, but rather, as Golder (2006) and Hicken & Stoll (2011) demonstrate, is affected by the number of candidates who compete in the presidential election. Moreover, Hicken & Stoll (2013) also demonstrate that the powers of the presidency, which help determine the value of coordinating to win the presidential prize, also shape projection.

Furthermore, the distribution of governmental power has an impact on the nationalization of district-level party systems. Federal systems, where subnational governments maintain great independence, lessen the importance of national-level party strength. Federal systems, therefore, reduce political actors' incentives to coordinate across districts and make it likely that the number of parties across the country will exceed the average number at the district level. In contrast, as Chhibber & Kollman (1998, 2004) argue, systems or conditions that centralize power in the national government tend to promote tighter projection, so that the national party system matches the district party systems more closely and makes FPTP systems more likely to have two national parties. Similarly, Hicken (2009) finds both in cross-national analysis and in his case studies of Thailand and the Philippines that "vertical" concentration of power in the central government (rather than subnational governments) and "horizontal" concentration of power in the national president (rather than the national legislature) each encourage cross-district coordination and reduce the inflation of the number of parties between district and national levels (Hicken 2009).

The flow of **Figure 2** creates the impression that the district-level behavioral effect occurs prior to the coordination between voters and elites in different districts. However, it is not unusual for the cross-district coordination to precede or coincide with the intradistrict coordination that leads to a district-level number of parties. For example, political actors at the district level may choose to concentrate their support on particular parties based on the strength of those parties at the national level. It is this issue that, Stoll (2013) argues, has constrained sectarian African-American parties from gaining representation in the United States. In specific districts, African-Americans

have made up at least a plurality of the population—a fact that should have allowed them to gain representation even under FPTP rules—but, with a small share of the national population, sectarian African-American parties were not seen as viable competitors. **Figure 2** therefore includes a feedback arrow from the national level back to the district level. Nevertheless, little research has been done on this issue, and the field would benefit from more work that addresses it.

In summary, in the causal chain linking electoral rules to the national party system, there are two discrete stages in which context can influence discretionary human decision making. There are more opportunities for context to shape national party systems than is the case for district disproportionality, where the bulk of the influence of electoral rules is through their mechanical effect, and where there are fewer opportunities for human discretion to affect the outcome. As a result, in most contexts, electoral rules will have a consistent effect on disproportionality, whereas for the number of national parties, the effect will vary. (However, where the M+1 rule fails, too many parties may draw substantial support, and the underrepresentation of some of these parties will increase disproportionality, as in the Russian 1995 election.) In some contexts the election rules will have a substantial impact, but in other identifiable contexts the effect will be marginal.

CONCLUSION

Political analysts tend to agree that electoral rules play a significant part in shaping political outcomes, but rules do not work in a vacuum. It seems almost certain that a polity's context—whether social, economic, or political—shapes political outcomes as well.

In this article, we offer a two-part framework for understanding when context mediates the effect of electoral rules on political outcomes, and when the rules are more likely to work in an unadulterated fashion. First, with the important exception of what we call coercive contextual factors, context should not shape the formulaic application of electoral rules that involve no human discretion (i.e., mechanical links between rules and outcomes). Context should only shape behavioral links—that is, those involving human behavior. Second, contextual factors ought to have a more substantial impact on political outcomes when there are a larger number of—especially behavioral—steps. Where the causal chain linking rules to an outcome is fairly short, an electoral system is more likely to have the outcome typically expected of it by theories of the effects of political institutions. However, where the causal chain is longer, most commonly there will be numerous steps involving human discretion, thus introducing greater opportunity for contextual factors to alter the choices people make.

This conceptual framework is not specific to the outcomes discussed here. Indeed, the causal chain grows longer, and the possibility of contextual factors mediating the effects of electoral rules grows stronger, as our focus reaches beyond the number of parties in the national legislature to include both issues of governance and ideological representation (Ferree et al. 2013b). For example, the effect of election rules on ideological congruence between the median voter and the government is greatly shaped by the ideological polarization of the party system. The effect of election rules on government stability in parliamentary systems depends not only on the number of political parties but also on party cohesion, itself affected by ballot structure, party disciplinary tools, and party organization. Government and individual accountability are affected by the election rules, but their effect is conditional on all these additional factors, as well as others such as the international interdependence of the economy and the concentration of policy-making power. Recent work on governance and representation has begun systematically to take these contextual features into account. For an application of this framework discussing the role of contextual factors in shaping descriptive representation, see Krook & Moser (2013).

In seeing our emphasis on contextual factors, some readers may view our argument as simply stating that context matters and that all analysis must be country-specific. Such an interpretation would grossly misread our analysis. We do not suggest that every unique feature of a given country will mediate the effects of electoral rules; our point is not that all politics are ad hoc or wholly dependent on context. Rather, we highlight the importance of specific types of contextual factors that ought to promote particular outcomes in systematic ways.

Contextual factors can alter the effects of electoral rules at particular points in the causal chain. Where rules have mechanical effects, involving no human discretion, contextual factors will have little influence. However, where outcomes are a product of human behavior, contextual factors may be powerful forces. Where constitutional designers are aware of the limits of the effects of particular electoral rules on specific political outcomes, they can design their institutions accordingly and prepare their polities for the likely outcomes. Furthermore, where constitutional engineers are aware of the specific contextual factors (and the specific types of contextual factors) that shape outcomes, recognize the extent to which these factors are present in the society for which they are designing rules, and understand what types of behaviors these factors are likely to affect and how, they will be better able to design institutions to address these problems.

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New From Annual Reviews:

Annual Review of Organizational Psychology and Organizational Behavior

Volume 1 • March 2014 • Online & In Print • http://orgpsych.annualreviews.org

Editor: Frederick P. Morgeson, The Eli Broad College of Business, Michigan State University

The Annual Review of Organizational Psychology and Organizational Behavior is devoted to publishing reviews of the industrial and organizational psychology, human resource management, and organizational behavior literature. Topics for review include motivation, selection, teams, training and development, leadership, job performance, strategic HR, cross-cultural issues, work attitudes, entrepreneurship, affect and emotion, organizational change and development, gender and diversity, statistics and research methodologies, and other emerging topics.

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Editor: Stephen E. Fienberg, Carnegie Mellon University Associate Editors: Nancy Reid. University of Toronto

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