[Forthcoming in Larry LeDuc, Dick Niemi and Pippa Norris (eds), *Comparing Democracies 3*, London: Sage.]

2.

Electoral Systems and Election Management

Elisabeth Carter and David M. Farrell[1]

The sine qua non of representative democracies is a process of elections that is fair and competitive. This is the role of electoral institutions, which determine how elections are fought, how the act of voting results in the election of political representatives and the determination of which political leader (in a presidential system), or party or set of parties (in a parliamentary system), is to form the executive leadership for the next few years. Electoral institutions cover a multitude of responsibilities. This chapter deals with two: the electoral system, which is responsible for determining how the voting act translates into an election result; and election management bodies, providing the over-arching structure within which the electoral process occurs. We spend most time on the first of these issues, starting in section 2.1 with a classification of the world's different electoral systems. This is followed, in section 2.2, by a review of the main political consequences of electoral systems. Section 2.3 deals with questions relating to electoral system design and reform. In section 2.4 our attention shifts to a focus on the issue of election management, with an overview of how this varies across our range of democracies.

2.1. Classifying electoral systems

The world of electoral systems is crowded and complex, and becoming more so all the time.[2] The range of variations among the different electoral systems makes life quite difficult for the analyst seeking to produce an acceptable typology. One option might be to simply base a classification of the systems in terms of their *outputs,* that is, with reference to the process of translating votes into seats where one distinguishes between those systems which have 'proportional' outcomes and those with 'non-proportional' outcomes. The essence of proportional systems is to ensure that the number of seats each party wins reflects as closely as possible the number of votes it received. In non-proportional systems, by contrast, greater importance is attached to ensuring that one party has a clear majority of seats over its competitors, thereby (hopefully) increasing the prospect of strong and stable government.

An alternative approach to classification – and the basis for most of the existing typologies – entails breaking the electoral system down into its component parts, focusing on the *mechanics* of how votes are translated into seats. Douglas Rae (1967) was the first to distinguish three main components of an electoral system: 'district magnitude', 'electoral formula' and 'ballot structure'. While these terms may sound grandiose, in fact their meaning is quite simple, and they will be used to structure our examination of the different electoral systems covered in this chapter.[3] District magnitude (M) refers to the size of the constituency (or 'district'), measured in terms of the number of seats to be filled. For example, in the U.S. and the U.K., which both use the single member plurality system, each constituency elects just one legislator (M = 1); by contrast, in Spain, which uses a list system of proportional representation, on average each region elects seven legislators (M = 7).

The ballot structure determines how voters cast their votes. Here the common distinction is between *categorical* ballots, such as those used in the U.S. or Brazil, where

---

[2] This chapter deals only with national-level electoral systems. Clearly, another interesting dimension of variation is the large range of different electoral systems at sub-national level, such as in the U.S. (Bowler, Donovan and Brockington 2003), the U.K. (Farrell 2001a), and Australia (Farrell and McAllister 2006).
[3] The primary emphasis of the standard electoral system classifications is on proportionality variations, which in large part explains our decision to focus on these three components. Clearly there are other dimensions of variation in electoral system design such as: assembly size, electoral threshold (in essence the mirror image of M) and legal thresholds. For more discussion, see Blais and Massicotte (2002); Farrell (2001). Other features of variation – that significantly affect gender and ethnic minority representation – include gender quotas and reserved seats (cf. Norris 2004).

voters are given a simple either/or choice between the various candidates (in the U.S.) or party lists (in Brazil) on the ballot paper, and *ordinal* ballots, such as in Ireland or Malta, where voters can vote for all the candidates, ranking them in order of preference. Finally, the electoral formula manages the translation of votes into seats. As we shall see, there is a large range of electoral formulas currently in operation (and theoretically a limitless supply of alternatives).

Having outlined the three main components of electoral systems, the next stage is to determine exactly how to use them in developing an appropriate classification of electoral systems. There has been a lot of discussion about the precise effects of the three components on the performance of electoral systems (Farrell 2001; Lijphart 1994). The general consensus is that district magnitude has the greatest effect on the overall proportionality of the result: the larger the district magnitude the more proportional the translation of votes to seats.[4] This might lead us to expect that a classification of electoral systems should base itself first and foremost on this component. However, most of the existing classifications tend to be based on the electoral formula first, only taking secondary account of the other features of electoral systems (Blais and Massicotte 2002; Bogdanor 1983).[5] We will follow this conventional approach too.

[Table 2.1 about here]

Plurality systems

Table 2.1 provides some preliminary information on the electoral systems used for parliamentary elections around the world. One hundred and seventy-eight democracies are grouped according to the four main electoral formulas in use: plurality, majority,

---

[4] After district magnitude, the electoral formula also has a significant effect on proportionality. A third characteristic, which has come to prominence quite recently (Lijphart 1994; Taagepera 2008) is assembly size, i.e., the number of seats in the parliament. Technically assembly size is not actually part of the electoral system (and hence is not covered in this chapter) but, in combination with district magnitude, it does have a profound effect on the proportionality of the election result.

[5] More sophisticated classifications are available which give equal attention to all three components of electoral systems (Blais 1988; Taylor and Johnston 1979), but while these may produce more theoretically appropriate typologies they also tend to be somewhat unwieldy.

proportional and mixed.[6] Starting with the plurality formula, of the main families of electoral systems dealt with in this chapter, the single member plurality system (SMP, often referred to as 'first past the post') predominates in Anglo-Saxon democracies. This was one of the first electoral systems deployed in the emerging democracies of the late nineteenth and early twentieth centuries, and as Table 2.1 reveals, it is still one of the most popular electoral systems in use, with 20 percent of the world's democracies using it, including some of the largest in the world. Indeed, the case of India, with a population of just over of one billion, is singularly responsible for the fact that the plurality system is used by a plurality of the world's voters (Farrell 2001).

A close relative of SMP is the block vote system, in which the plurality electoral formula is applied in multi-member districts. Much more common in the late nineteenth and early twentieth centuries, the block vote system was actually the progenitor of SMP (Carstairs 1980). One of its principal shortcomings is that it produces greater disproportionality than SMP systems (the rule in the case of disproportional systems is that as district magnitude increases so does the disproportionality of election outcomes), and this was one reason for the decision to move to single-member districts, though, today a sizeable number of countries (6 percent, including Kuwait, Lebanon and the Philippines) continue to use the block vote system.

One way of reducing the disproportional tendencies of the block vote system while retaining the multi-seat constituencies is to reduce the number of votes that a voter can cast.[7] In its generic form this system is known by the name 'limited vote' and is used for upper house elections in Spain and also at sub-national level in some U.S. states (Bowler, Donovan and Brockington 2003). The objective behind the limited vote is simple: allowing the voter fewer votes than the number of seats to be filled reduces the chance of a large

---

[6] Note that throughout this chapter (as, indeed, throughout this volume) the N of cases varies depending on data access. This chapter focuses on electoral systems for legislative elections. Inevitably things are much simpler when it comes to presidential elections for the simple reason that just one office holder is being elected, thus by definition ruling out any proportional electoral systems. Here, with very few exceptions (such as Ireland's president who is elected using the alternative vote system), the choice boils down to a single member plurality system or a majority-runoff one. About two-thirds of cases use the majority-runoff system (cf. Blais and Massicotte 2002).

[7] Another way of reducing the disproportional tendencies of the block vote system is to allow voters to express more than one vote for a candidate. This is known as the cumulative vote, which is now used by a number of states in the U.S. (Bowler, Donovan and Brockington 2003).

party having its full slate of candidates elected (a major problem with the block vote system) and increases the chance for candidates from smaller parties to pick up seats. As the vote becomes more limited (i.e., the number of votes voters have is reduced) the system becomes less disproportional. The limited vote variant in which voters are only able to express one vote in a multi-seat constituency is also referred to as the 'single non-transferable vote' system (SNTV), a semi-proportional electoral system that was used in post-war Japan until its replacement by a mixed-member majoritarian system in the 1990s (Grofman et al. 1999). Today SNTV is used in Afghanistan, Jordan, and Vanuatu.

Majority systems

Majority systems make up the second main set of electoral systems, and are used by 13 percent of the countries in our sample (see Table 2.1). Although less popular than the plurality systems, majority systems are used by two leading democracies – Australia and France. As the title suggests, the defining characteristic of these electoral systems is the use of a majority electoral formula in which, to get elected, a candidate needs a majority of the total vote. There are two main forms of majority electoral systems: the runoff systems (which, in turn, can be sub-divided) and the alternative vote. In the first part of the twentieth century a number of countries moved away from SMP to the runoff variant, the principal motivation being that elected politicians would have the support of more than half the electorate in their district. In runoff systems the means by which this is produced entails the holding of a second election, usually one or two weeks after the first. In runoff-majority systems (such as those used for the election of the French president) only the candidate winning the most and the candidate winning the second most numbers of votes in the first round are permitted to go forward to the second round, thus ensuring a majority result. A variant of this, known as the runoff-plurality system, as used in French legislative elections, permits more than two candidates in the second round (by setting a vote threshold in the first round that more than two candidates are capable of surpassing) and therefore does not guarantee a majority result, though the very act of reducing the field of candidates in the second round does tend to produce a majority result more often than not. As we shall see, runoff systems are common in many former French colonies such as the Central

African Republic or Vietnam; they have also achieved some prominence in former Soviet satellite states such as Turkmenistan and Uzbekistan. Less common than the runoff systems is the alternative vote system (AV) which is characteristic of Antipodean democracies, particularly Australia (for national and most statewide elections) where it goes by the name 'preferential voting' (Farrell and McAllister 2006; Reilly 2001).[8] Designed as a 'one-shot' variant of runoff, AV operates on the basis of a ballot structure that allows voters to rank order all candidates from all parties (1, 2, 3, etc.). All the number 1 votes are counted and if no candidate achieves an overall majority of the vote (50 percent plus one) then the candidate with the fewest votes is eliminated from the race and their ballots are transferred to the remaining candidates based on the number 2 votes. This process continues until eventually one of the candidates emerges with an overall majority.

List systems

Set against plurality and majority electoral systems are three families of proportional systems: list, single transferable vote, and mixed-member proportional. What all three have in common is a district magnitude greater than one. District magnitude matters significantly in determining the proportionality of the election result. In countries like the Netherlands, Israel and Slovakia, where the whole country is treated as a single district, there is very high proportionality (as we can see in the editors' website). By contrast, elsewhere (for example in Ireland and Spain), the country is divided into a large number of small districts, each of which has low average district magnitudes. As a result we find lower levels of overall proportionality.

It is the combination of district magnitude and electoral formula that plays the greatest role in determining overall proportionality, and these are two of the main sources of variation in the list family of electoral systems. List electoral formulas come in a number of forms, but the basic point of distinction is between one set of formulas that determines seat allocation by subtraction, and another set which does so by division. The former is technically referred to as 'largest remainder' formulas (in the U.S. this is sometimes known

---

[8] In the U.S. this is sometimes referred to as the Instant Runoff Vote (IRV). It is used in San Francisco city elections, and is being pushed by the Fairvote group (www.fairvote.org).

as the Hamilton method) and operates with the use of an electoral quota. While theoretically numerous different quotas are available, the choice tends to boil down to two – Hare or Droop quotas. In largest remainder systems the counting process occurs in two rounds. First, parties with votes exceeding the quota are awarded seats, and the quota is subtracted from the total vote. In the second round, those parties left with the 'largest remainder' of votes are awarded the remaining seats in order of vote size.[9] The Hare quota (votes/seats) produces slightly more proportional results than the Droop quota (votes/seats+1) because the latter uses a larger quota, thus reducing the importance of remainders (cf. Lijphart 1994).

List systems that operate with divisors are referred to technically as 'highest average' systems. There are three types of highest average system in use: the d'Hondt method which is by far the most common (in the U.S. this is known as the Jefferson method), the modified Sainte-Laguë method most associated with Scandinavian democracies (Denmark, Norway and Sweden), and the pure Sainte-Laguë method (in the U.S. known as the Webster method) which was adopted by New Zealand for the list element of its new MMP electoral system. A highest average count occurs in a number of stages. First, the votes are sorted into piles for each of the parties. These totals are then divided by the relevant divisors (e.g., the d'Hondt divisors are 1, 2, 3, etc.) until all the seats have been allocated. The seats are awarded to those parties with the 'highest averages' in order of vote size. The proportionality of the outcome is influenced by the type of divisors that are used. The d'Hondt divisors tend to produce the least proportional result overall. By contrast, the Sainte Laguë divisors (1, 3, 5) produce the most proportional outcomes, indeed, so proportional that the Scandinavian countries modified the divisors and used 1.4 instead of 1 as the first, so as to temper some of the proportionality of pure Sainte-Laguë.

The single transferable vote

The second main family of proportional systems – the single transferable vote (STV) – is one of the most unusual and least used. It is unique to Ireland and Malta, although it is also used for upper house elections in Australia as well as in most state

---

[9] For illustrations of how this works in practice, see Blais and Massicotte (2002); Farrell (2001).

elections across Australia (Bowler and Grofman 2000; Farrell and McAllister 2006). STV operates with relatively small multi-member electoral districts, and voters are invited to rank order all the candidates from all the parties that appear on the ballot paper (in Australia in order for the vote to be declared valid voters are required to rank order *all* the candidates). This ballot structure thus gives voters a maximum possible choice. An STV count occurs in a number of stages which means that unless computer counting is used (something that is starting to become more common) the count can take hours or even days to complete. Having counted all the number 1 preference votes, the count officials determine whether any of the candidates have amassed sufficient votes to surpass the Droop quota (which for STV is [votes/seats+1]+1). Any that have are deemed elected. Attention then turns to the next stage of the count which either involves the transfer of the surplus votes (i.e., those votes that were over and above the number of votes required to equal the quota) of the winning candidates or – if no candidates were elected in the preceding stage of the count, or the size of the surplus vote of any victorious candidates is too small to make a difference to the result for the remaining candidates – the elimination of the candidates with the fewest votes and the transfer of those votes to those candidates still left in the race. The decision of which actual ballot papers to transfer to remaining candidates is determined by which candidates were ranked next on each ballot paper being transferred. This process of transferring surpluses or transferring the ballots of eliminated candidates continues until all the remaining seats have been filled by victorious candidates.

Mixed-member systems

Finally, we have the mixed-member systems, the first of which is unambiguously a proportional system – mixed-member proportional (MMP). Until relatively recently this electoral system was unique to Germany but in the past twenty years or so it has been adopted by seven other countries, including the interesting case of New Zealand which switched to MMP after a referendum process in the mid-1990s. As its title suggests MMP is a mix of the SMP and list electoral systems, in which the list element of the election is used to balance or correct the disproportional tendencies of the SMP element. While this may sound simple enough in principle, it can actually be quite complex, and can also vary

in its details from one country to the next (the most complex variant being that used in Hungary, see Benoit 2005).[10] It is best outlined by summarizing the German variant which elects 50 percent of the Bundestag by SMP and the other 50 percent by list (largest remainder-Hare). The list result is used to correct proportionality imbalances resulting from the SMP result, and to ensure that the larger parties are not unduly rewarded by their ability to win more district seats. It is the mix of single-seat SMP districts electing geographically-grounded 'constituency politicians' together with multi-seat list districts producing proportional results (thus ensuring that smaller parties win seats) that causes some prominent scholars to question whether this electoral system may be 'the best of both worlds' (Shugart and Wattenberg 2001).

The final electoral system to consider bears a large resemblance to the one just dealt with. Referred to as the 'parallel' or mixed-member majoritarian (MMM) system, this electoral system has one significant difference from its MMP counterpart, as a result of which it is probably most accurately described as a 'semi-proportional' electoral system. The key difference is that the proportional element of the system is not used to compensate for the disproportional result in the SMP element: in other words, the two parts of the election are treated as separate, parallel processes. MMM does allow small parties to gain representation but it nonetheless ensures that the larger parties win the lion's share of the seats in parliament and hence stand a greater chance of controlling the executive. MMM is the third most commonly used system around the world, and is far more common than MMP. That said, in both Russia and Ukraine the decision was recently made to drop MMM and move over to list PR.

Multi-tier districting

MMP and MMM systems share the use of different tiers of representation – a set of single-seat SMP constituencies and a set of multi-seat regions or even one national list. But use of more than one tier of representation is by no means unique to the mixed-member systems. A number of list systems operate with two (in some instances, such as Hungary, even more) tiers of representation. The principal rationale flows from the impact that

---

[10] For more on how mixed-member systems can vary, see Farrell (2001); Shugart and Wattenberg (2000).

district magnitude has on proportionality. Using a second tier of representation – in which a certain number of parliamentary seats are determined at the higher tier level – facilitates greater proportionality without having overly large regions: it irons out any discrepancies at the constituency level and produces a result that is more proportional. The basic idea is that any remaining votes not yet used to fill seats at the lower tier are pooled and the distribution of the remaining seats is determined in the second tier. Multi-tier districting is common among largest remainder systems (such as Austria, Belgium and Greece); it also tends to be used in highest-average Sainte-Laguë cases. Consistent with the fact that the d'Hondt system is the least proportional of the list formulas, most of the countries using it do not bother with a second tier.[11]

Legal thresholds

Multi-tier districting is not the only means of adding complexity to the process of electoral system design.[12] Electoral engineers can be extremely inventive in finding other ways of influencing proportionality. Prominent among these are legal thresholds, which are now used in the majority of list and mixed-member systems. A legal threshold is a minimum vote that a party is required to achieve before it is awarded parliamentary seats. It can be used to stop small parties from winning any parliamentary seats at all, or to limit the number of seats they do win.[13] Commonly such thresholds are set at about 3-5 percent of the national vote, though there are some extreme cases, such as Turkey which imposes a 10 percent threshold and Poland where the threshold is set at 7 percent. In some instances (as in Belgium and Spain) the threshold may be set at regional rather than national level. Thresholds are also sometimes set for coalitions as well as for individual parties. In the Czech Republic, for example, there is 5 percent threshold for individual parties, a 10 percent one for coalitions of two parties, a 15 percent one for coalitions of three parties, and a 20 threshold for coalitions of four parties or more.

---

[11] For more details, see Blais and Massicotte (2002), and Farrell (2001).

[12] On the problems of introducing too much complexity into electoral system design – a feature becoming ever more common in recent times – see Taagepera (2008).

[13] The number of seats a party might win can be limited by imposing a legal threshold on one or other tiers of representation.

2.2. Electoral system consequences

Electoral systems have consequences for the political system, as will be demonstrated throughout this volume. The large literature on this (e.g., Cox 1997; Gallagher and Mitchell 2005; Katz 1997; Lijphart 1994; Norris 2004; Taagepera and Shugart 1989) has identified a number of consequences, among them the effects on proportionality, on numbers of parties, and on the representation of women and minorities.[14] In addition to these 'systemic' effects, which are all related in some way to the proportionality profiles of electoral systems, there has also been an increasing interest in the 'strategic' effects of electoral systems. We deal with each of these in turn.

Proportionality effects

As electoral systems translate the number of votes won by parties into the number of seats they are awarded in parliament there is always an element of distortion. However, the magnitude of this distortion varies: while some electoral systems translate votes into seats in a relatively proportional fashion, others tend to do this in a disproportional way, with parties ending up with seat shares that are considerably higher or lower than their vote shares. We can examine just how proportional or disproportional different electoral systems are by making use of one of the various indices that have been developed for this very purpose, the most favored of which is the Gallagher index (1991). Table 2.2 focuses on a number of different countries, and (in the first column) reports the average disproportionality scores of national parliamentary elections held since 2000, with high scores indicating a large distortion between parties' vote shares and their seat shares.

[Table 2.2 about here]

It is immediately apparent from Table 2.2 that there is considerable variation in the proportionality profiles of the different systems. We can note, for example, that the average

---

[14] In itself this is a large and complex area, to which we cannot do full justice in the space we have. As we shall touch on below (and also developed by other chapters in this volume), there are questions to be asked about the direction of causality, and also about the effects of other institutional and cultural features on some of these relationships. There are also many other potential electoral system consequences that do not feature in our analysis, perhaps most prominent among these being the role of electoral systems (as part of the process of institutional design) in facilitating conflict-reduction and peace-building (e.g., Reilly 2001; Reynolds 1999, 2002).

election outcome in the United Kingdom in this period was very disproportional, but that in South Africa there was hardly any distortion between the number of votes parties won and the number of seats they gained in parliament. However, rather than simply pick out individual countries, it is more interesting to see whether different *types* of electoral systems have distinct proportionality profiles, and we can do this by examining the average disproportionality score for each type of system (as reported in italics). This does, indeed, reveal discernable patterns: in general, STV and list PR systems tend to produce more proportional electoral outcomes, whereas the plurality and majority systems and MMM all give rise to less proportional outcomes. There are, however, cases that buck the trend. In Moldova results have been disproportional despite a list system being used. By contrast, in the U.S. outcomes have been proportional in spite of SMP being in operation. These cases (and others) support the general finding that while electoral systems exert a major influence on the proportionality of the electoral outcome, they are not the only factors (e.g., Farrell 2001; Lijphart 1994).

Party systems

The over- and under-representation of different sized parties brings us to the relationship that exists between electoral systems and party systems, a subject of much academic discussion and argument for many years. The debate about the precise nature of the link between electoral systems and party systems was set in train most notably by the French political scientist, Maurice Duverger, who argued that SMP electoral systems 'favored' two-party systems, while proportional electoral systems 'favored' multiparty systems (Duverger 1954). And it is easy to see why this might be the case: by making it more difficult for small parties to win seats in parliament, non-proportional systems (including SMP ones) are bound to result in fewer parties represented in parliament. What is more though, this reductive effect is further exacerbated by the psychological effects that such systems have (Blais and Carty 1991) which come to prominence when voters and elites alter their behavior precisely because they are aware that small parties are likely to be under-represented.

There is broad agreement amongst analysts of electoral systems that, just as Duverger suggested, certain types of electoral system tend to coincide with certain types of party system: SMP, runoff and AV systems tend to be used in countries that are characterized by relatively few parties, while proportional electoral systems tend to be found in multiparty systems. And there is evidence to support these arguments in Table 2.2. If we focus on the second column of the table, which reports the 'effective number of parliamentary parties' in each country – a figure calculated by an index that counts the number of parties by weighting them according to their seat share (Laasko and Taagepera 1979) – we can discern a number of patterns. More specifically, we can see that in most (but not all) countries that use SMP systems, the effective number of parliamentary parties does indeed tend to be low, whereas it is relatively high in most countries that employ a proportional systems – be they list PR, STV or one of the two forms of mixed-member system. Furthermore, if we move away from considering the type of electoral system, and examine instead the proportionality of the outcome of elections in each country (the first column of Table 2.2), we also detect an association between levels of proportionality and the effective number of parliamentary parties ($r = -.268$, p (one tailed) $< .01$).[15]

That said, as was the case with the proportionality profiles of the different systems, there are some countries which do not conform to our expectations, and where the effective number of parliamentary parties is higher or lower than we would have expected given their electoral system. For instance, the party system of Ethiopia is characterized as a '8.12-party system', even though SMP is in operation, and Papua New Guinea has a staggering 16.42 effective parties, despite AV being used here. By contrast, the effective number of parties in South Africa is low, even though this country uses list PR. These examples therefore suggest the relationship between electoral systems and the number of parties gaining representation in parliament is a *probabilistic* one rather than a deterministic one. That is, while high levels of proportionality *tend* to increase the probability of multipartyism, and low proportionality *tends* to increase the probability that the number of parties in parliament will be low, factors other than the electoral system (most notably the strength

---

[15] Clearly the relationship is weaker than shown in earlier studies (e.g., Lijphart 1994). In large part, this is due the large number, and more particularly range, of countries included in our sample, lending support to Baldini and Pappalardo's (2009) argument in favor of a smaller, less diverse, number of cases in the analysis of electoral system consequences.

and nature of the cleavages of each country) also play an important role in shaping the number of parties that end up being represented in parliament. On top of this, (and following Colomer 2005) we should also question the direction of the relationship: can we be sure that multipartyism really is a consequence of proportionality rather than a cause?

Parliament as a 'microcosm'?

Our last systemic consequence of electoral systems concerns the representation of women and candidates from ethnic minorities. Advocates of proportional electoral systems argue that proportional systems tend to produce a more socially representative parliament because they allow parties to field more candidates in each district, and so increase the likelihood that both male and female candidates and candidates from different social and ethnic backgrounds will gain parliamentary representation. Much of this depends on the parties themselves, but studies that have focused on this issue (e.g., Norris 1985) have indeed concluded that proportional systems do appear to play a role in promoting greater women representation. And our own data support this finding too: the last column of Table 2.2 indicates that the percentage of women in parliament is highest in countries that use list PR – the average across all countries that use list PR is 21.5 per cent. What is more, when we correlated the proportionality of the electoral outcomes in each country with the percentage of women represented in parliament in each country, we found a significant, negative relationship ($r = -.314$, p (one tailed) $< .01$). Therefore, although some exceptions exist (for example Tanzania, where the percentage of women represented in parliament is high even though the electoral system produces relatively disproportional outcomes), we can conclude that proportional electoral systems, in general, tend to encourage greater representation of women than non-proportional systems.

Strategic effects

The 'maturing' of the field of electoral systems has witnessed a growing interest in what can be referred to as their strategic effects (Shugart 2005). That is, they influence the behavior of both voters and party elites. We have already pointed to the fact that voters and

party elites may act differently if they are aware that, because of the disproportionality of the electoral system, small parties are likely to be under-represented: voters might be prompted to support a large party instead of 'wasting' their vote on a smaller contender and elites may decide not to contest certain races. However, the proportionality of electoral systems is not the only factor that has strategic effects. The ballot structure of electoral systems is also likely to exert an influence on the behavior of voters and elites.

In recent years, electoral systems research has been paying growing attention to ballot structure – i.e., to how the ballot paper (or computer screen) that the voter uses to cast a vote has been designed. In our brief discussion of ballot structure at the beginning of this chapter we drew on Rae's classification of electoral systems that distinguished between ballot structures that are 'categorical' or 'ordinal', but perhaps a more useful and nuanced way of distinguishing between ballot structures is to talk of a spectrum running from 'closed' to 'open' ballot structures. The point of contention is that there are important differences between those ballot papers that simply allow voters to tick a box for their preferred party (i.e., a 'closed' ballot structure) and those that allow voters to express a wide range of options such as in the case of the STV system where voters can rank-order all candidates on the ballot paper (i.e., an example of an 'open' ballot structure; more generally, see Farrell and Scully 2007; Shugart 2005).

This dimension of variation in electoral system design can have important consequences for how politicians behave both with regard to their representative roles (i.e., how they represent their voters) and also in how they campaign at election time. A recent study of the representative activities of Members of the European Parliament (MEPs) shows conclusively a greater emphasis on individual voter contact among those politicians elected under 'open' electoral systems than is the case in the more 'closed' electoral systems (Farrell and Scully 2007). Similar variations are shown in a study of MEP campaign behavior, which finds a greater concern for individual voter contact in the more 'open' cases (Bowler and Farrell 2008).

2.3. Design and reform

One of the core decisions of a new democracy is the design of its electoral system (Colomer 2004; Norris 2004; Sartori 1997). On occasions this is a matter that is determined by the new political elites by themselves. On other occasions the electoral system is the legacy of a departing colonial power. More often than not the electoral system is the product of a messy process of debate, intrigue and compromise – a common enough pattern in any process of institutional design (Goodin 1996). A useful way of examining electoral system design over the years is to adopt an historical-institutionalist perspective. We can do this with reference to Huntington's influential study on the 'waves of democratization' (1991). According to Huntington, the first wave, from the 1820s to the 1920s, featured the processes of democratization in the U.S. and across much of Europe. The second wave was a phenomenon of post-Second World War decolonization and the rebuilding of democracies like the Federal Republic of Germany. The third wave, starting in the 1970s, featured the burgeoning new democracies of Latin America, Central and Eastern Europe and the former Soviet Union. Reilly and Reynolds (1999) argue persuasively that debates over electoral system adoption vary quite distinctly across these three waves, both in terms of the types of electoral systems selected, and also in terms of the ways in which the electoral systems were chosen.

In the cases of first-wave democracies, the tendency was for electoral systems to emerge gradually, in line with the gradual evolution of the democracies themselves. At least two main patterns are apparent (cf. Carstairs 1980). First, there are the cases of Anglo-American democracies which are characterized by relatively homogenous societies, based around a single partisan cleavage and a simple two-party system (Lijphart 1999). There was a desire by the established elite to retain maximum hold over the system, seeking to constrain the influence of minor groups and parties. Relatively early on there was a focus on territorial links, tied in with the desire of local elites to hold on to their power bases. Once the countries had settled on SMP systems, there was little desire for change. For the most part, attention was focused on questions regarding constituency boundary divisions and the gradual reform of the administration of elections.

Quite a different pattern occurred in the early continental European democracies, which tended to be characterized by more plural societies, lacking a single dominant group (Lijphart 1999). In these cases, even in the early years, there was recognition of the need to

accommodate different groupings in the political system. At the turn of the twentieth century, the writings of prominent scholars (like d'Hondt and Sainte-Laguë) influenced a shift towards the adoption of list systems.[16]

In this first wave, therefore, the evidence clearly points to a gradual, evolutionary process in the adoption of an electoral system. The system is designed by the indigenous elite. In some cases the decision is deliberate, such as Australia's decision to adopt AV in 1918 to try and prevent splits among the parties of the right (Farrell and McAllister 2006). It is also worth drawing attention to the central importance of party politics in influencing the type of electoral system adopted, thus lending support to the argument that Duverger's hypotheses might need to be looked at in reverse (Colomer 2005). Indeed, rational choice perspectives on electoral system design place party interest center-stage (Benoit 2004; Boix 1999). In his seminal work, Boix (1999) builds on Rokkan's (1970) classic exposition for the move to PR – namely that it was prompted by elite fears over the rise of socialism – to propose a formal model in which parties, as unitary actors, adopted PR systems to reduce the risk of loss of power.[17]

Huntington's second wave is much shorter than the other two: it is focused on the post-war decades which saw the reestablishment of some democracies and the process of decolonization that produced a spate of new democracies. According to Reilly and Reynolds (1999), two central features of electoral system design in this wave were 'colonial inheritance' and 'external imposition', both of which obviously involved external elites to a significant extent. The influence of historical colonial links is very evident if we glance at countries around the world: over half of the former British colonies use SMP; over a third of the former French colonies use runoff systems and a further 20 percent use a list system; and two thirds of Spain's former colonies also use list PR. As for electoral design by 'external imposition', perhaps the best example of this is post-war (West) Germany, where the allied powers played an important role in the adoption of the MMP system. This was designed to avoid the apparent mistakes of the Weimar period when extreme

---

[16] As Carstairs (1980) shows, in many cases this shift from SMP to list was via a two-round majoritarian system.
[17] For important critiques, see especially Blais et al. (2004) who find no evidence to support the 'socialist threat' thesis. See also Katz (2005) and Rahat (2004) who dispute the simplistic assumptions that underlie these rational choice perspectives.

proportionality was said to have influenced the instability of the system, and also to incorporate some of the supposed 'strengths' of the Anglo-American constituency-based system.

The third wave of democratization produced some new patterns of electoral system adoption. A central feature of this wave has been conscious design. Reilly and Reynolds, (1999) refer to the cases of democratic transition in Hungary, Bolivia, South Africa, Korea, Taiwan and Fiji, among a host of other cases, where there was extensive discussion and debate about the merits of particular electoral systems (on East and Central Europe more generally, see Birch et al. 2002). This is not to deny the fact, however, that such a process involved close bargaining between competing elites (Nohlen 1997) and that the system which emerged may, indeed, have required some 'messy compromise' (Norris 1995; Taagepera 1998). Furthermore, there is also the point that many of these third-wave countries have far from completed the process of democratization (Rose and Chull Shin 1999), and therefore further electoral reforms can never be ruled out – as we have witnessed with the recent decisions to replace MMM systems in Russia and Ukraine with more proportional list systems.

Electoral reform

Of course, reform of existing electoral systems is not unique to emergent democracies and we have seen the issue come on to the political agenda of a number of established democracies. However, this is a relatively new phenomenon as, with the exceptions of France and Greece where electoral reforms have been pretty commonplace, the abiding principle had tended to favor the status quo (Katz 2005; Nohlen 1984; Taagepera and Shugart 1989). Yet, quite suddenly in 1993-94, three leading democracies changed their electoral systems to variants of the mixed-member systems: Italy from list, Japan from SNTV, and New Zealand from SMP – providing clear evidence to some that mixed-member systems were now the systems of choice (Shugart and Wattenberg 2001).[18]

---

[18] These were not the only electoral reforms at that time, though they were certainly the most notable. Another democracy to change its electoral system was Israel, which introduced a system for directly electing the

It is difficult to establish exactly how electoral reform emerged on the political agenda. In one of the first overviews of the phenomenon, Norris (1995: 7) discerns three long-term factors which appear to have played a role in triggering demands for electoral reform: (1) electoral change (and, in particular, the weakening of electoral alignments); (2) 'political scandals and/or government failures which rock public confidence in the political system'; and (3) the ability of voters (in Italy and New Zealand) to use referendums to force the hands of politicians. Shugart (2001) makes a useful distinction between inherent and contingent factors, the former creating the pre-conditions for reform, the latter symbolizing the trigger for the process to begin (e.g., a crisis or scandal of some sort, perceived serious problems with the existing system, etc.). Despite such persuasive arguments it remains difficult to theorize about the causes of electoral reform, for the simple reason that, notwithstanding the dramatic developments in New Zealand, Italy and Japan in the early 1990s (and Italy's subsequent return to a list system in 2005), there have been so few cases, at least at national level. Katz (2005) counts a mere 14 cases of reform in the past half century, and others concur with this low figure (Renwick 2009; Reynolds et al. 2005).

Of course, the national arena is not the only place in which debates over electoral reform can occur, as witnessed for example by the adoption on new electoral systems at sub-national level in the U.K. in the 1990s (Farrell 2001) and, more recently, by reforms across a number of Canadian provinces, some of which are still ongoing (Cross 2005). Nor for that matter should we restrict our coverage only to large scale, fundamental electoral reform (Katz 2005), because there is plenty of evidence of tweaks to existing electoral systems (for instance, changes to electoral formulas, or to the rules relating to legal thresholds) that can have important impacts on election outcomes (cf. Bowler, Carter and Farrell 2003). Finally, there have also been important developments in the process of managing elections, the subject of our final section.

2.4. The management of the electoral process

---

country's prime minister (judged as a variant of MMP – see Hazan 2001). This ill-conceived reform was repealed in 2001 (Rahat and Hazan 2005).

There is a growing interest by governments worldwide in the running of a smooth, well-run and transparent electoral process. Given the general unwillingness to embrace large scale reform of the electoral system, it is perhaps understandable that attention would turn, at least, to the administration of the electoral process itself. This is the area with greatest scope for further development, as shown, for example, by the gradual acceptance that new technologies can have a role to play in making the electoral process more transparent, more efficient, and more cost effective. We can see this, for instance, in the gradual move away from the traditional paper ballots. In recent years, more and more countries have been making use of electronic voting machines. India is moving towards full electronic voting, while in Brazil electronic voting is the only way for electors to cast their vote. In other countries (such as Belgium and the Netherlands) electronic voting is used alongside traditional manual voting.[19] Estonia has taken things even further and enabled online voting in its 2007 parliamentary elections.[20]

But nowhere is reform to the process of election administration more apparent than in the rise of institutions dedicated to the management of the election process itself. Such institutions have assumed responsibility for a number of key functions including determining who is eligible to vote, managing the nominations of parties and/or candidates, conducting the polling, counting the votes, and tabulating the results (Wall et al. 2006: 5; Massicotte et al. 2004: ch. 4). By undertaking such activities, these institutions – known as Election Management Bodies (EMBs)[21] – not only ensure that elections are organized and managed efficiently, but also promote fairness, openness and transparency, and hence contribute to the legitimacy of democracy and the enhancement of the rule of law. EMBs have played a prominent role in the process of democratic design and consolidation in third wave democracies (in large part encouraged by foreign NGOs seeking to promote capacity building and provide appropriate technical assistance).[22]

Despite having a number of common functions, EMBs differ in their structure, and globally, three main types or models of institutions can be identified: independent EMBs,

---

[19] More generally, see: http://aceproject.org/epic-en/vo#VO11.
[20] http://en.wikipedia.org/wiki/Electronic_voting_in_Estonia#cite_note-0.
[21] Election management bodies have a number of different titles. For instance, the body responsible for the management and administration of federal elections in Australia is known as the Australian Electoral Commission, while the EMB in charge of national elections in Canada is known as Elections Canada.
[22] For discussion on when EMBs fail in their mandate, see Wall et al. 2006: 297.

governmental EMBs, and 'mixed' EMBs (Wall et al. 2006). Independent EMBs, as their title suggests, are independent of the executive branch of government and have full responsibility for the implementation of elections and very often also have responsibility for developing policy and making decisions that relate to the electoral process.[23] They are composed of non-aligned experts or of representatives from political parties (or of a mix of both) and are most often accountable to the legislature. Governmental EMBs, on the other hand, are headed by a minister or a civil servant who is accountable to a cabinet minister. In this model, then, elections are organized and managed by the executive branch of government, either through a ministry (such as the Ministry of the Interior) and/or through local authorities. Indeed, in many instances (as in Sweden and Switzerland) a central EMB performs some key functions only, and leaves tasks (especially those that pertain to the election day itself) to local and/or regional bodies. Elsewhere (as in the U.K. and the U.S. for example), the system is so decentralized that there is no central EMB, and all matters are left to local authorities (Pastor 2006: 273-5). Crucially, and regardless of how decentralized they are, EMBs in the governmental model only have the power to implement the election. They do not have the policy-making power that independent EMBs have (Wall et al. 2006). Finally, 'mixed' EMBs combine elements of the independent and the governmental model. Elections are organized and implemented through a ministry and/or through local authorities, as in the governmental model, but there is a second body, independent of the executive, which assumes responsibility for overseeing and supervising the election, and which, in some instances, has the power to develop a regulatory electoral framework under the law (Wall et al. 2006).

Despite the categorization of EMBs into three types or models, no two EMBs are identical. Rather, the precise structure of each body is a product of the country's history and its political and legal tradition. In many instances the structure has been heavily influenced by former colonial administrations, while in a few cases the slate was 'wiped clean' and

---

[23] In some countries, such as Jamaica and Romania, the tasks of implementation and policy making are in fact split between two separate independent bodies (http://aceproject.org/ace-en/topics/em/ema02).

wholly new EMBs have been established. However, whatever the type chosen, there has been a discernable trend for EMBs to become entrenched as permanent institutions.[24]

[Table 2.3 about here]

Independent EMBs are by far the most common form. Indeed, of the countries considered in this volume, nearly 65 percent have an independent EMB. While a number of established democracies such as Australia and Canada have independent EMBs, this type of EMB is most popular in democracies of the second and third wave. A large number of African countries, including many former British Colonies have independent EMBs. Similarly, independent EMBs are favored in South America (only Argentina does not have an independent EMB), in many states that were formerly under Soviet influence, and in many Asian countries. Governmental EMBs, by contrast, are most common in (Western) Europe, North Africa and in a number of countries in the Middle East. New Zealand and the USA also have governmental EMBs. Mixed EMBs are the least common type of EMB, and are found in France and in a number of former French colonies, in some West European countries (for example the Netherlands, Portugal and Spain) and in Japan.

The different models of EMBs present both advantages and disadvantages, some of which are quite obvious. For instance, an independent EMB benefits from being less likely to be subjected to restrictions imposed by the government or to political pressures, and this autonomy, along with its perception of impartiality, increases the chances of it being able to promote electoral legitimacy. This is perhaps why independent EMBs have been so popular amongst new democracies. Other advantages of independent EMBs are that they may be better able to develop staff professionalism, ensure electoral administration is under unified control and plan and institutionalize election tasks (Wall et al. 2006: 21). The flip side of this – and hence the advantages of governmental EMBs – is that independent EMBs may lack political influence, which could impede them in carrying out their tasks effectively and acquiring sufficient funding. Furthermore, independent EMBs tend to work at a higher cost since, unlike governmental EMBs, they are not able to draw on a pool of skilled staff and

---

[24] That said some countries do have temporary EMBs that exist during election periods only. For instance, in mixed systems, the governmental component of the EMB is sometimes temporary as civil servants are redeployed to their 'home' ministry or department outside of election periods (Wall et al. 2006: 17).

co-opt governmental structures to assist in the implementation of elections (López-Pintor 2000).

Of course, it is not only the structure of the EMB which determines how well it performs, and how efficient, open, transparent and impartial it is and is perceived to be. This all depends on the EMB's behavior too. While EMB independence can be legally embedded in the constitution or the electoral law (as in Mexico and Uruguay), this does not mean that impartiality and autonomy from governmental control are impossible in other types of system. Indeed many governmental EMBs (such as those in New Zealand and Sweden) are perceived as being fair and impartial despite being governmental ones. The performance of EMBs thus also depends on whether there is political will and commitment to allow the EMB to act freely and impartially, and on how the members of the EMB actually behave (Wall et al. 2006: 11).

2.5. Conclusion

The worldwide rise of EMBs is explained, to a large extent, by the dramatic growth in the number of democracies in recent decades and by the desire of these new democracies to pay careful attention to the establishment of transparent electoral processes and institutions. Established democracies have clearly learned appropriate lessons from these developments. As the passing of the Help America Vote Act by Congress in 2002 and the establishment of the U.K. Electoral Commission in 2000 illustrate, they too have taken steps to strengthen the processes and institutions of electoral administration.

New democracies have also been instrumental in contributing to the diversity of electoral systems used around the world today. While they have not invented new systems per se, their enthusiastic adoption of mixed-member electoral systems (especially MMM) has led to these systems becoming more prominent across a range of democracies. In the middle of the twentieth century very few countries made use of mixed-member systems but today they are used in nearly 20 percent of countries.

With the notable exceptions of New Zealand and Japan (and for a time also Italy), established democracies have been much less keen on adopting mixed-member electoral

systems for national level elections. That said, as recent developments in the U.K. and across the Canadian provinces show, they appear to be growing in popularity at the sub-national level.

If there is some 'institutional contagion' between new and old democracies, there are also considerable differences in the motivations behind the reforms and in the enthusiasm that has accompanied them. EMBs were established in new democracies in a bid to promote and protect the rule of law, build and nurture political stability and ensure electoral transparency. As for electoral systems, mixed-member systems have been introduced widely in new democracies because, by their very nature, they appear to offer 'something for everyone'. In this way then, although not perfect, they perhaps represent the best compromise option for actors with very different demands (cf. Rahat 2008).

In established democracies, by contrast, the lack of any real electoral system reform at the national level, and the trend towards establishing and consolidating institutions of electoral management appears better explained by the desire of governments to try and address the growing dissatisfaction of citizens with the democratic process. Although, in a few instances (notably in the early 1990s), governments did respond to the concerns of citizens with full-scale electoral reform, in the main, full-scale reform has been conspicuous by its absence. Instead governments have chosen to tackle such problems in a variety of other ways, including introducing non-party reforms (such as direct elections of mayors or direct democracy initiatives), implementing reforms at the sub-national level (as in the Canadian provinces), or institutionalizing a more independent and transparent process for managing elections.

Political elites in new democracies, who have the power to design, shape and nurture their electoral institutions, therefore face very different demands and pressures and have different priorities than their counterparts in older, more established democracies. This goes a long way to explaining why there is so much variation in the nature of electoral institutions around the world, and why there are very different prospects for the reform of these institutions.

Table 2.1: The world of electoral systems: Legislative elections in the 2000s

	N of cases	%	Prominent examples
Plurality formulas			
Single member plurality	36	20.2	USA, UK, India
Block	11	6.2	Lebanon, Kuwait
Single Non-Transferable Vote	3	1.7	Afghanistan, Jordan
Majority formulas			
Runoff	20	11.2	France, Gabon
Alternative Vote	4	2.2	Australia
Proportional formulas			
List	67	37.6	Russia, Spain, South Africa
Single Transferable Vote	2	1.1	Ireland, Malta
Mixed formulas			
Mixed-member Proportional	9	5.1	Germany, New Zealand
Mixed-member Majoritarian	26	14.6	S. Korea, Japan
Total	178	99.9	

Source: Editors' website

Table 2.2: Electoral system consequences: Legislative elections in the 2000s

	Disproportionality	Effective no. parliamentary parties	Women legislators (%)
Single member plurality			
St Kitts and Nevis	**24.07**	1.98	6.7
Gambia	17.79	**1.21**	9.4
United Kingdom	17.25	2.32	19.5
Yemen	13.54	1.68	**0.3**
Canada	10.66	2.93	21.3
Tanzania	9.82	1.48	**30.4**
Ethiopia	7.66	**8.12**	21.9
India	4.53	6.52	11.6
United States	**2.43**	2.00	19.5
Average of all cases	*11.79* *(n=26)*	*2.66* *(n=27)*	*15.1* *(n=29)*
Block vote			
Mauritius	**10.25**	**1.99**	17.1
Philippines	5.11	3.17	**20.5**
Mongolia	**2.67**	**1.79**	**6.6**
Average of all cases	*6.01* *(n=3)*	*3.53* *(n=4)*	*12.5* *(n=7)*
Runoff			
France	**17.77**	**2.38**	16.7
Haiti	7.60	**8.58**	**4.1**
Kyrgyzstan	**5.69**	4.41	**25.6**
Average of all cases	*11.88* *(n=4)*	*4.84* *(n=10)*	*17.1* *(n=17)*
AV			
Bhutan	**26.63**	**1.79**	2.7
Australia	9.41	2.39	**26.7**
Papua New Guinea	**7.92**	**16.42**	**0.9**
Average of all cases	*13.90* *(n=4)*	*5.78* *(n=4)*	*12.1* *(n=4)*
List PR			
Moldova	**12.74**	2.08	21.8
Morocco	6.30	**9.75**	10.5
Argentina	4.99	6.49	40.0
Indonesia	4.45	7.07	**4.1**
Angola	4.30	**1.31**	15.0
Israel	2.51	7.01	17.3
Sweden	2.27	4.19	**47.0**
South Africa	**0.26**	1.97	33.0
Average of all cases	*4.84* *(n=65)*	*3.89* *(n=66)*	*21.5* *(n=66)*
STV			
Republic of Ireland	**6.24**	**3.21**	**14.2**
Malta	**1.63**	**2.00**	**9.2**
Average of all cases	*3.94* *(n=2)*	*2.61* *(n=2)*	*11.7* *(n=2)*
MMP			
Albania	**19.17**	3.18	**7.1**

Lesotho	8.17	**2.16**	23.5
Mexico	5.93	2.78	23.2
Germany	3.39	**3.72**	10.9
New Zealand	**1.75**	3.37	**33.1**
Average of all cases	*7.10* *(n=8)*	*2.93* *(n=8)*	*18.1* *(n=8)*
MMM			
Madagascar	**23.07**	2.18	7.9
Singapore	22.22	**1.05**	24.5
Japan	11.88	2.68	**6.4**
Georgia	11.21	3.04	**31.6**
Pakistan	6.31	**5.38**	21.1
Guinea	**0.76**	2.19	19.3
Average of all cases	*10.86* *(n=19)*	*2.57* *(n=22)*	*15.2* *(n=22)*

Notes: This table shows sample cases only, including those cases that are at one or other extreme of the measures (emboldened). Data on all countries can be found in the Editor's website. The averages are means calculated from all cases, the number of which varies depending on data availability. The disproportionality measure is calculated using the Gallagher Index and the effective number of parties is calculated using the Laakso-Taagepera Index – see text for details (also: www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php). The percentage of women legislators refers to the most recent situation in national parliaments.

Source: Editors' website; Farrell (2010)

Table 2.3: Election management bodies in the 2000s

	N of cases	%	Prominent examples
Independent	101	64.7	Australia, Brazil, Canada, India, Israel, Russia, South Africa
Governmental	32	20.5	Germany, Ireland, Italy, New Zealand, UK, USA
Mixed	23	14.7	Argentina, France, Japan, Netherlands, Spain

Source: Wall et al. (2006)

Bibliography

Baldini, Gianfranco and Adriano Pappalardo. 2009. *Elections, Electoral Systems and Volatile Voters.* Houndmills, Basingstoke: Palgrave Macmillan.

Benoit, Kenneth. 2004. 'Models of Electoral System Change', *Electoral Studies.* 23: 363-89.

Benoit, Kenneth. 2005. 'Hungary: Holding Back the Tiers', in Michael Gallagher and Paul Mitchell, eds. *The Politics of Electoral Systems.* Oxford: Oxford University Press.

Birch, Sarah, Frances Millard, Marina Popescu, Kieran Williams. 2002. *Embodying Democracy: Electoral System Design in Post-Communist Europe.* Houndmills, Basingstoke: Palgrave Macmillan.

Blais, André. 1988. 'The Classification of Electoral Systems', *European Journal of Political Research.* 16: 99-110.

Blais, André and R. Kenneth Carty (1991), 'The Psychological Impact of Electoral Laws: Measuring Duverger's Elusive Factor', *British Journal of Political Science*, 21(1): 79-93.

Blais, André and Louis Massicotte. 2002. 'Electoral Systems', in Lawrence LeDuc, et al., eds. *Comparing Democracies 2.* London and Thousand Oaks: Sage.

Blais, André, Agnieszka Dobrzynska and Indridi Indridason. 2004. 'To Adopt or not to Adopt Proportional Representation: the Politics of Institutional Choice', *British Journal of Political Science.* 35: 182-190.

Bogdanor, Vernon. 1983. 'Introduction', in Vernon Bogdanor and David Butler, eds. *Democracy and Elections: Electoral Systems and their Political Consequences.* Cambridge: Cambridge University Press.

Boix, Carles. 1999. 'Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies', *American Political Science Review.* 93: 609-24.

Bowler, Shaun and David Farrell. 2008. 'Just because they are "second-order" doesn't mean you can put your feet up: Campaign activity in European Parliament elections',

DCERN Working Paper, University of Manchester (www.dcern.org.uk/research/working_papers/index.htm).

Bowler, Shaun and Bernard Grofman. eds. 2000. *Elections in Australia, Ireland, and Malta under the Single Transferable Vote.* Ann Arbor, MI: University of Michigan Press.

Bowler, Shaun, Elisabeth Carter and David Farrell. 2003. 'Changing Party Access to Elections', in Bruce Cain, Russell Dalton, Susan Scarrow, eds. *Democracy Transformed? Expanding Political Opportunities in Advanced Industrial Democracies.* Oxford: Oxford University Press.

Bowler, Shaun, Todd Donovan and David Brockington. 2003. *Electoral Reform and Minority Representation: Local Experiments with Alternative Elections.* Columbus, OH: Ohio State University Press.

Carstairs, Andrew McLaren. 1980. *A Short History of Electoral Systems in Western Europe.* London: George, Allen & Unwin.

Cross, William. 2005. 'The Rush to Electoral Reform in the Canadian Provinces: Why Now?', *Representation.* 41: 75-84.

Colomer, Josep. 2004. ed. *Handbook of Electoral System Choice.* London: Palgrave.

Colomer, Josep. 2005. 'It's Parties that Choose Electoral Systems (or, Duverger's Laws Upside Down)', *Political Studies.* 53: 1-21.

Cox, Gary. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems.* Cambridge: Cambridge University Press.

Duverger, Maurice (1954), *Political Parties: Their Organization and Activity in the Modern State*, London: Methuen.

Farrell, David. 2001. *Electoral Systems: A Comparative Introduction.* Houndmills, Basingstoke: Palgrave Macmillan.

Farrell, David. 2001a. 'The United Kingdom Comes of Age: The British Electoral Reform "Revolution" of the 1990s', in Matthew Shugart and Martin Wattenberg, eds. *Mixed-Member Electoral Systems: The Best of Both Worlds?* Oxford: Oxford University Press.

Farrell, David. 2010. *Electoral Systems: A Comparative Introduction.* Second edition. Houndmills, Basingstoke: Palgrave Macmillan

Farrell, David and Ian McAllister. 2006. *The Australian Electoral System: Origins, Variations and Consequences.* Sydney: University of New South Wales Press.

Farrell, David and Roger Scully. 2007. *Representing Europe's Citizens? Electoral Institutions and the Failure of Parliamentary Representation.* Oxford: Oxford University Press.

Gallagher, Michael (1991), 'Proportionality, Disproportionality and Electoral Systems', *Electoral Studies*, 10(1): 33-51.

Gallagher, Michael and Paul Mitchell (eds), *The Politics of Electoral Systems.* Oxford: Oxford University Press.

Goodin, Robert. Ed. 1996. *The Theory of Institutional Design.* Cambridge: Cambridge University Press.

Grofman, Bernard, Sung-Chull Lee, Edwin Winckler and Brian Woodall. Eds. 1999. *Elections in Japan, Korea and Taiwan under the Single Non-Transferable Vote: The Comparative Study of an Embedded Institution.* Ann Arbor, MI: University of Michigan Press.

Hazan, Reuven. 2001. 'The Israeli Mixed Electoral System: Unexpected Reciprocal and Cumulative Consequences', in Matthew Shugart and Martin Wattenberg, eds. *Mixed-Member Electoral Systems.* Oxford: Oxford University Press.

Hernando, Pedro J. 2006. 'Spain: Mixed Model Electoral Management Becomes Well Established', in Alan Wall, et al., *Electoral Management Design: The International Idea Handbook*, pp. 37-40, Stockholm: International Institute for Democracy and Electoral Assistance.

Huntington, Samuel. 1991. *The Third Wave: Democratization in the Late Twentieth Century.* Norman, OK: University of Oklahoma Press.

Katz, Richard. 1997. *Democracy and Elections.* Oxford: Oxford University Press.

Katz, Richard. 2005. 'Why are There so Many (or so Few) Electoral Reforms?', in Michael Gallagher and Paul Mitchell, eds. *The Politics of Electoral Systems.* Oxford: Oxford University Press.

Laakso, Markku and Rein Taagepera. 1979. 'The Effective Number of Parties: A Measure with Application to West Europe', *Comparative Political Studies*, 12: 3-27.

Lijphart, Arend. 1994. *Electoral Systems and Party Systems.* Oxford: Oxford University Press.

Lijphart, Arend. 1999. *Patterns of Democracy.* New Haven, CT: Yale University Press.

López-Pintor, Rafael. 2000. *Electoral Management Bodies as Institutions of Governance*. New York: Bureau for Development Policy, United Nations Development Programme. http://www.undp.org/governance/docs/Elections-Pub-EMBbook.pdf

Massicotte, Louis, André Blais and Antoine Yoshinaka. *Establishing the Rules of the Game: Election Laws in Democracies.* Toronto: University of Toronto Press.

Nohlen, Dieter. 1984. 'Chances and Choices in Electoral Systems', in Arend Lijphart and Bernard Grofman, eds. *Choosing an Electoral System.* New York: Praeger.

Nohlen, Dieter. 1997. 'Electoral Systems in Eastern Europe: Genesis, Critique, Reform', in J. Elklit, ed. *Electoral Systems for Emerging Democracies: Experiences and Suggestions.* Copenhagen: Danish Ministry of Foreign Affairs.

Norris, Pippa. 1985. 'Women's Legislative Participation in Western Europe', *West European Politics*, 8(4): 90-101.

Norris, Pippa. 1995. 'Introduction: The Politics of Electoral Reform', *International Political Science Review*. 16: 3-8.

Norris, Pippa. 2004. *Electoral Engineering: Voting Rules and Political Behavior.* Cambridge: Cambridge University Press.

Pastor, Robert A. 2006. 'The US Administration of Elections: Decentralized to the Point of Being Dysfunctional', in Alan Wall, et al., *Electoral Management Design: The International Idea Handbook*, pp. 273-6, Stockholm: International Institute for Democracy and Electoral Assistance.

Rae, Douglas. 1967. *The Political Consequences of Electoral Laws.* New Haven, CT: Yale University Press.

Rahat, Gideon. 2004. 'The Study of the Politics of Electoral Reform in the 1990s: Theoretical and Methodological Lessons, *Comparative Politics.* 36(4): 461-79.

Rahat, Gideon. 2008. *The Politics of Regime Structure Reform in Democracies: Israel in Comparative and Theoretical Perspective.* New York: State University of New York Press.

Rahat, Gideon and Reuven Hazan. 2005. 'Israel: The Politics on an Extreme Electoral System', in Michael Gallagher and Paul Mitchell, eds., *The Politics of Electoral Systems.* Oxford: Oxford University Press.

Reilly, Ben. 2001. *Democracy in Divided Societies.* Cambridge: Cambridge University Press.

Reilly, Ben and Andrew Reynolds. 1999. 'Electoral Systems and Conflict in Divided Societies', *Papers on International Conflict Resolution.* No. 2, Washington, DC: National Academy Press.

Renwick, Alan. 2009. *Changing the Rules of Democracy: The Politics of Electoral Reform.* Cambridge: Cambridge University Press.

Reynolds, Andrew. 1999. *Electoral Systems and Democratization in Southern Africa.* Oxford: Oxford University Press.

Reynolds, Andrew. 2002. ed. *The Architecture of Democracy: Constitutional Design, Conflict Management and Democracy.* Oxford: Oxford University Press.

Reynolds, Andrew, Ben Reilly and Andrew Ellis. 2005. *Electoral Systems Design: The New International IDEA Handbook.* Stockholm: International IDEA.

Rokkan, Stein. 1970. *Citizens, Elections, and Parties: Approaches to the Comparative Study of the Process of Development.* Oslo: Universitetsforlaget.

Rose, Richard, and Doh Chul Shin. 1999. 'Democratization Backwards: The Problem of Third Wave Democracies', *Studies in Public Policy* 314, Glasgow: Centre for the Study of Public Policy.

Sartori, Giovanni. 1997. *Comparative Constitutional Engineering: An Inquiry into Structures, Incentives and Outcomes.* Second edition. London: Palgrave Macmillan.

Shugart, Matthew. 2001. 'Electoral "Efficiency" and the Move to Mixed-Member Systems', *Electoral Studies.* 20: 173-93.

Shugart, Matthew. 2005. 'Comparative Electoral Systems Research: The Maturation of a Field and New Challenges Ahead', in Michael Gallagher and Paul Mitchell, eds., *The Politics of Electoral Systems.* Oxford: Oxford University Press.

Shugart, Matthew and Martin P. Wattenberg, eds. 2001. *Mixed-Member Electoral Systems: The Best of Both Worlds?* Oxford: Oxford University Press.

Taagepera, Rein. 1998. 'How Electoral Systems matter for Democratization', *Democratization.* 5: 69-91.

Taagepera, Rein. 2007. *Predicting Party Sizes: The Logic of Simple Electoral Systems.* Oxford: Oxford University Press.

Taagepera, Rein and Matthew Shugart. 1989. *Seats and Votes.* New Haven, CT: Yale University Press.

Taylor, P. J. and Ron Johnston. 1979. *Geography of Elections.* London: Penguin.

Wall, Alan, Andrew Ellis, Ayman Ayoub, Carl W. Dundas, Joram Rukambe and Sara Staino. 2006. *Electoral Management Design: The International Idea Handbook*, Stockholm: International Institute for Democracy and Electoral Assistance.