## Krister Lundell

## Contextual Determinants of Electoral System Choice

## A Macro-Comparative Study 1945-2003




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## FOREWORD

"The long and winding road that leads to your door", Paul McCartney sang on the last album that the Beatles released. He did not, of course, have research in mind, but this line might just as well describe the process of writing a doctoral thesis. The road is definitely long, it is filled with curves and sidetracks, and it marks the end of an era. Despite being a rather lonesome passage, it is nonetheless an interesting adventure with lots of challenges and plenty of joy.

However, the journey would have been impossible to undertake without the help of many people. I have had the privilege of receiving continuous assistance from several scholars with expert knowledge. First of all, I would like to thank my supervisor throughout this project, Professor Dag Anckar, for providing valuable assistance and for being my chief source of inspiration and encouragement since the beginning of my career. I am deeply thankful to Professor Lauri Karvonen for contributing greatly to this work. Without his immense effort, the thesis would not have been written. I also want to express my gratitude to Professor Carsten Anckar for providing guidance during several phases of the project. I have benefited greatly from his advice, comments and insights.

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Hus Lindman, November 23, 2005

Krister Lundell

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## 1. INTRODUCTION

### 1.1 Purpose of the Study

The major part of the research on electoral systems has dealt with the systemic consequences of electoral rules. Attention has also been given to their strategic effects, which implies that emphasis is placed on the nature and extent of choice given to voters under different systems. Since the collapse of the Soviet Union and the Communist regimes in Eastern Europe, a growing trend in the literature has been to deal with electoral systems in their own right, and try to understand the basis for electoral system choice rather than the consequences of electoral laws. The wave of democratization in Third World countries and the fashion for electoral reform in established democracies since the beginning of the 1990s have also contributed to the trend of studying electoral systems as dependent variables instead of explanatory variables. The present study belongs to this category of electoral system research.

Until the late 1950s, there was a strong belief that political results were almost completely determined by the institutional framework. Concerning electoral systems, the most important theoretical contribution to the institutional approach was made by Maurice Duverger (1951) - he emphasized the importance of electoral rules in explaining the nature of a country's party system. The growing influence of sociological methods and theories in political science in the 1950s called this view in question by emphasizing the role of social phenomena as the main determinants of party systems. Perhaps the most central work within the sociological approach is Party Systems and Voter Alignments: Cross-National Perspectives by Seymour Martin Lipset and Stein Rokkan (1967). According to the authors, there are four lines of social cleavage - center-periphery, state-church, land-industry and owner-worker - that explain the emergence of different party systems. Modern party systems are seen as a result of the kinds of cleavages that were present in society when political parties were organized, and how conflicts were managed. Electoral systems only modified socially determined party systems.

Although major historical events and the resulting ethnic, religious and economical cleavages cannot be neglected in the study of electoral institutions, several research efforts since the 1960s have confirmed the importance of electoral rules in shaping
politics. Both approaches bear relevance to this study. The contextual environment provides the basic theoretical framework for explaining electoral system choice. However, the third wave of democratization has given rise to a similar third wave of electoral system choice, in which deliberate electoral system design has played a central role. The virtues of different electoral systems have been widely debated on the basis of research on political consequences of electoral rules. The sociological and the institutional approach are actually related to each other: the former considers the electoral system as an expression of social cleavages and party systems, whereas the latter regards the electoral system as a manipulative instrument for shaping politics in accordance with the societal needs. Thus, both represent a rational perspective on the role of electoral systems. However, it should be observed that no rational choice analysis will be conducted. In this context, the term rational means, first, that the structural traits of a society constitute problems, which need to be solved by appropriate electoral arrangements, and, second, that the decisions on these rules are made by actors, who prefer particular electoral methods because they are favorable to them.

The emergence of political institutions is not, however, completely determined by sociopolitical forces. Geographical, cultural and colonial factors exert a great deal of influence on the evolution of political institutions (see e.g. Lijphart 1991a). An alternative set of explanations is offered by an approach that comprises different kinds of diffusion. According to this perspective, the choice of political institutions in a society is the result of influence from other societies rather than a response to societal needs and problems of its own. These approaches are not opposed to each other: an institutional choice may be rational as well as imitated.

Furthermore, the constitutional setting may determine the choice of particular institutions (Anckar and Karvonen 2004). According to the institutional perspective - not to be confused with the institutional approach as opposed to the sociological approach mentioned above - some institutional choices follow logically upon others, whereas some other combinations tend to be inefficient and inappropriate. Given a specific institutional setting, some electoral systems may be more attractive than others. The influence of other political institutions constitutes the third basic approach to the study of electoral system choice. This perspective also coincides with the rational perspective to some extent, since both are concerned with choosing an appropriate electoral system given some specific
structural circumstances. However, the kind of contextual features differ: one approach is aimed at societal needs, whereas the other is concerned with the influence of other institutional choices.

Consequently, the purpose of the study is to explore the influence of contextual factors on the choice of electoral systems for (direct) parliamentary elections between 1945 and 2003. Given the macroscopic approach, I shall not pay attention to the specific factors that led to the adoption of the electoral law in each country. My intention is to discover general patterns and create an explanatory framework of the adoption of electoral systems in the modern world. The research approach is explorative in nature, since there is no established theory in this field of electoral system research. Associations between contextual factors and electoral system choice are studied from three competing but simultaneously overlapping theoretical perspectives: a rational, a cultural and historical, and an institutional perspective.

Four variables are analyzed within the rational perspective: ethnic/cultural diversity, country size, party system structure, and party system transformation. The former two are pure structural traits, whereas the latter two also involve an actor-related dimension. This study is certainly concerned with contextual determinants but the role of political actors is not totally disregarded. More specifically, the dissertation does not focus on actors but on the political context in which actors make their decisions on electoral provisions. This matter becomes particularly apparent when the association between party systems and electoral system choice is analyzed. Electoral system choice as a consequence of the party system structure is foremost an actor-related matter but has a structural dimension as well. As to the rational perspective, I consequently distinguish between structurally generated problems and actor-related problems.

The cultural and historical perspective consists of the following variables: colonial diffusion, regional diffusion, and temporal diffusion. Although both colonial legacy and regional influence are concerned with imitating institutional choices of prestigious countries, I follow the common approach of treating colonial legacy as a distinct kind of diffusion. In addition to the hierarchical and spatial dimensions of imitating institutional choices embodied by colonial and regional diffusion, a temporal dimension is introduced by including a third variable that regards
electoral system choice as an epoch phenomenon. Three variables are analyzed within the institutional perspective: form of government, territorial organization and chamber structure. This perspective certainly rests upon a weaker theoretical basis than the former two, but it is nevertheless justified with respect to the interest of analyzing constitution building and the way countries tend to combine different institutions.

Concerning the task of explaining the origin of political institutions, some variables are of greater dignity than others are. This is to a large extent a consequence of varying distance between independent and dependent variables. Some variables are rather descriptive in nature, whereas some variables are more profound as general determinants of political phenomena. Determinants of electoral system choice is a rather unexplored topic, at least in a macrocomparative sense, and for the purpose of breaking new ground, the descriptive part of the study has an evident intrinsic value. Consequently, the strategy of analyzing electoral system choice from three different perspectives also becomes justified. A survey of the basic literature on the origin of political institutions in general and electoral institutions in particular results in a framework consisting of rational, cultural and institutional forms of explanation.

The operationalization of the dependent variable is based on a detailed survey of electoral formulas and systems applied in parliamentary elections during the postwar era. The exposition of electoral formulas and previous classifications results in a common typology that distinguishes between plurality, majority, proportional and mixed electoral systems. This typology constitutes the dependent variable in the multivariate analyses. These analyses are preceded by descriptive and bivariate analyses of associations between each independent variable and electoral system choice. Concerning some descriptive and bivariate analyses, the operationalization of electoral systems slightly differs from the broad typology of four basic systems because of the nature of the independent variables involved. Descriptive and bivariate patterns are studied by means of frequencies, chi-square tests, mean value analysis and correlation analysis. In the multivariate analyses, binary and multinomial logistic regression is applied.

The study consists of every electoral system choice between 1945 and 2003, i.e. every choice of electoral system by a newly independent country as well as every
major change of electoral system in independent countries. The total number of cases is 268. In addition to the total sample, electoral system choice in democracies is studied separately. This sample consists of 63 cases. Consequently, parallel analyses of all relevant cases as well as electoral system choice in democracies are conducted.

There are several reasons for choosing the year 1945 as a starting point. All national elections prior to the twentieth century were held under either the plurality or the majority rule; thus, providing little variance of the dependent variable. Concerning electoral system choice during the first few decades of the last century, the most essential feature was the change from majoritarian to proportional systems in several Western European countries. These changes are well documented in the literature, and explanations have also been provided. The rational perspective of this study is largely based upon these findings. The frequency of newly independent countries increased rapidly as of 1945, having earlier been quite low. Generally speaking, the end of the Second World War meant the beginning of a new era in practically every field. Taking these circumstances into consideration, I find it appropriate to observe cases during the postwar period; thereby following a rather common approach in macrocomparative political science.

The book consists of ten chapters. A general discussion on the importance of electoral systems is provided in the second part of the introduction. The introductory chapter is followed by a description of electoral formulas and systems in chapter 2, containing both previous classifications and the classification of electoral systems in the present study. The dependent variable of the study is defined in section 2.5. It also provides a descriptive survey of electoral system choice during the relevant time period. The theoretical framework is presented in chapter 3. To begin with, the matter of choosing electoral systems is generally discussed. Thereafter, determinants of electoral system choice are theoretically dealt with, and the operationalization of each independent variable is presented. The research design, including description of method, material and population, is outlined in chapter 4. In chapters 5, 6 and 7, descriptive and bivariate analyses of the relationship between electoral system choice and the independent variables within each perspective are provided. Multivariate analyses are conducted in chapter 8 . The results of the study are discussed in the final chapter.

### 1.2 The Importance of Electoral Systems

While most of the theory of electoral systems presupposes a democratic form of government, the choice of an electoral system is not necessary unimportant in a non-democracy. First of all, every country was non-democratic when the first electoral provisions were introduced, albeit in several cases before independence was achieved. Secondly, the electoral method plays an important role in consolidating a democratic system. The institutional framework of a nondemocracy may turn out to have a decisive impact on the development towards democracy. For this purpose, a discussion on the importance of political institutions in general and electoral systems in particular is provided.

Elections and electoral systems are integral parts of a broader set of political institutions that constitute a democracy. Other important institutional choices, in addition to electoral system, every new democracy is faced with are governmental system, of which parliamentarism and presidentialism are the primary forms, territorial organization, i.e. federal or unitary arrangements, constitutionalism, which is concerned with constitutional amendment rules and judicial review arrangements, and, lastly, chamber structure, i.e. a choice between unicameralism and bicameralism. The set of political institutions a fledging democracy adopts is crucial to the long-term success of any new regime as it structures the rules of the game of political competition. According to Arend Lijphart (1991a; 1992a: 207) and Giovanni Sartori (1994), the choice of electoral system and the choice of governmental type may be seen as the two most important institutional choices.

Institutions matter for several reasons. First, institutionalized systems are less volatile and more enduring, because institutions structure behavior into stable, predictable, and recurrent patterns. Second, by promoting the maintenance of political order and the rule of law, more coherent and effective political institutions are more likely to ensure civil liberties, to check the abuse of power, and to provide meaningful representation, competition, choice, and accountability. Third, wellinstitutionalized democracies are more likely to produce workable, sustainable, and effective economic and social policies, due to their effective and stable structures for representing interests. Fourth, capable and coherent democratic institutions provide effective tools for limiting military involvement in politics and asserting
civilian control over the military (Diamond, Linz and Lipset 1995: 33). James Scarritt and Shaheen Mozaffar summarize: "To craft democracies is to craft institutions" (1996: 3). Robust political institutions are particularly important to developing democracies in order to survive. Larry Diamond asserts that the single most important factor in the consolidation of democracy is not civil society but political institutionalization (1996: 238-239).

Political institutions are crucial in the development of politics and sociopolitical relations. Modernization may, Dieter Nohlen argues, be seen as a process of institutionalization. Simultaneously, political behavior is limited by the existing institutions. There is a mutual relationship between political culture and political institutions - both influence and condition one another. Nohlen also emphasizes the importance of institutional regulation in explaining governmental performance and for understanding differences in performance across nations (1996: 44-45).

Popular elections are the defining institutions of modern democracy (Katz 1997: 1). In the same spirit, Harry Eckstein asserts that "it is difficult to think of anything more fundamental to representative government than the electoral process" (1963: 247). The purpose of elections is, first, to decide who will represent each individual constituency in the legislative body, and, second, what the overall composition of the legislature by political party will be. By translating votes into seats, these decisions are managed by the particular electoral system used for each single election. The electoral method is, hence, a key variable in the political process: it largely determines who gets what, when and how (Stolpe 1997: 18; Reeve and Ware 1991: 4). Electoral rules are commonly assumed to condition the chances of success of competing parties or candidates in competitive elections.
R. Wildenmann, W. Kaltefleiter and U. Schleth (1965) assess the importance of electoral systems from another, more fundamental perspective. They maintain that electoral systems are important because they confront all of the 'deeper realities' of a political culture, of the social structure, and of ethnic and ideological divisions, with the channels through which they must move. Voters adjust themselves to these channels by learning what they will let pass and what they will block, and party tactics are adjusted to the options with which they are presented.

Within the range of democratic institutions, several scholars have argued that the choice of electoral system is the most important one. Lijphart (1994b: 1), for instance, regards the electoral system as the most fundamental element of representative democracy. Firstly, it has important political consequences, and, secondly, it is the most manipulative element of democratic politics: "If one wants to change the nature of a particular democracy, the electoral system is likely to be the most suitable and effective instrument for doing so" (Lijphart 1995: 412). As for the political consequences, the impact is both direct and indirect: direct in the sense that whoever is elected under one system might not be elected under another system, and indirect in the sense that it influences what kinds of parties, party systems and cabinets are formed. The internal party cohesion and discipline is also influenced by the electoral system: some systems encourage factionalism, whereas other systems promote unity. In addition, electoral systems influence party campaigning and the way political élites behave; thus affecting the broader political climate in a country (Reynolds and Reilly 1997: 8). The electoral system rewards particular types of political behavior and places constraints on others. To sum up, the electoral system largely determines the effectiveness of the entire political system, whether presidential or parliamentary (Nohlen 1996: 45).

For the same reason, the electoral system is perceived by many as the principal key to reforming the political system. With reference to Sweden, Yonhyok Choe (2004) argues that a partial reform of the electoral system can have positive effects in established democracies that suffer from democratic deficiency. Lijphart's (1995: 412) statement on electoral system change may be traced back to Sartori's often cited characterization of electoral systems as "the most specific manipulative instrument of politics" (1968: 273). Several other scholars agree that electoral rules are easier to change than most other features of a political system. One obvious reason is that electoral laws are usually not included in the constitution (Lardeyret 1991: 34; Lijphart 1991b: 48).

Another often quoted sentence is Pippa Norris' assertion that "electoral systems are rarely designed, they are born kicking and screaming into the world out of messy, incremental compromise between contending factions battling for survival, determined by power politics" (1995: 4). Andrew Reynolds and Ben Reilly (1997: 1) also claim that electoral systems are rarely consciously and deliberately selected. These statements are undoubtedly true when one looks at the world of
electoral systems before the end of the Cold War. Decisions on electoral rules have often been taken within one of two circumstances - either constitutional drafters lack basic knowledge of different electoral systems and their consequences or, conversely, this knowledge is used for promoting electoral system design that is expected to maximize their own representation (Reilly and Reynolds 1999: 23).

Due to the prevailing interest in electoral system design and the debate over different options concerning electoral system choice, the assertions of accidental electoral system choice above are not altogether true, and might, if the trend continues, be quite incorrect in the near future. Even though many electoral system choices have been accidental, there are always some reasons for introducing a particular electoral system: "Electoral systems do not rise from a vacuum but from political debate and struggle" (Taagepera and Shugart 1989b: 234). The choice may be a result of e.g. colonial heritage, passing trends, partisan interests of political actors, conscious design, or a combination of circumstances. Still, surprisingly little attention has been given to the factors that shape electoral institutions in the early stages of their development or the ways in which they evolve.

In designing electoral systems, it is important to note that a given electoral system will not necessarily work the same way in different countries. Although electoral rules differ from each other with respect to their mechanical effects, the outcomes of a certain electoral system depend largely on the sociopolitical context in which it is applied. For instance, the application of a plurality system in a divided society, in which parties are organized along ethnic lines, may have totally different consequences than in a culturally homogeneous country, in which the party system reflects ideological issues. In addition to cultural structure divisions, consequences of electoral systems also depend on regional divisions, i.e. whether minority groups are regionally concentrated or dispersed. A given electoral system may, furthermore, work differently with regard to the democratic stability of a country, and whether there is an established party system or a 'party system' made up of embryonic, unformed and fragile parties (Reynolds and Reilly 1997: 8). The sociopolitical context largely determines the appropriateness of an electoral system - a system that functions satisfactory in one society might be disastrous in another. "The 'spin' that an electoral system gives to the system is ultimately contextual and
will depend on the specific cleavages and divisions within any given society" (Sisk and Reynolds 1998: 19).

As mentioned, the bulk of the electoral system research has focused on political consequences of elections conducted under different rules. Much less effort has been given to the understanding of cross-national variation in electoral systems, mostly because major electoral system reforms were rare in established democracies before the 1990s. The adopted electoral systems were basically seen as socially determined and permanent institutions. The purpose of writing this book is to fill a part of this gap in the field of electoral system research. For reasons mentioned earlier in this section, I find it justified to study electoral system choice in both democracies and non-democracies, although electoral institutions are regarded as more important in democracies. Obviously, both actors and structures matter in the process of choosing electoral systems. Explanations based on strategic calculations of political actors have been provided by e.g. Carles Boix (1999), Josep M. Colomer (2004), and Lijphart (1992a). The present study aims at explaining electoral system choice from a contextual perspective.

## 2. CLASSIFYING ELECTORAL SYSTEMS

The second chapter deals with electoral systems and the classification of different voting procedures in legislative elections, which, in turn, constitutes the basis of the dependent variable, electoral system choice. By way of introduction, the elements of electoral systems are described. Then, descriptions of all relevant electoral formulas are provided, and some classifications in the literature on electoral systems are presented. Thereafter, the typology of electoral systems in this study is presented. Finally, a descriptive survey of electoral system choice during the relevant time period is conducted.

This chapter is rather extensive for several reasons. In order to construct an appropriate typology of electoral systems, a survey of the available options as well as previous classifications is needed. The importance of electoral rules and choosing an electoral system was emphasized in the previous chapter. Since electoral systems have far-reaching political consequences, a description of advantages and disadvantages of each electoral formula is also desirable.

The treatment of electoral systems in a study that aims at explaining electoral system choice should be neutral and independent of expected political consequences of different voting procedures. Nevertheless, the matter of proportionality cannot be totally neglected in the classification of different seat allocation methods. A great deal of the features attributed to different electoral systems, as well as the debate on which electoral system is the most preferable in a given context, is related to the degree of proportionality of electoral outcomes. The term proportional system indicates that proportionality, and thus varying degree of proportionality, is an essential part of an electoral system. Lijphart asserts that "proportional representation would not have been invented, ... ...if politicians and citizens had not regarded the proportionality of electoral outcomes as an important objective" (1997: 75). One of the main reasons for introducing list PR was indeed to achieve a more accurate representation of the electorate and to provide minority representation (Carstairs 1980: 1-14; Lijphart 1991a: 75). Classifications of electoral systems are, as will be seen in section 2.3, often based on the proportionality of electoral outcomes.

Before describing different voting procedures, we need to distinguish between electoral laws and electoral systems. Electoral laws are the set of rules governing the whole process of elections, including the official calling of elections, suffrage and registration requirements, candidate selection, campaigning, voting procedures and the final determining of election results. Among these electoral laws, the electoral system is concerned with the final stage of the election process: how citizens vote, the style of the ballot paper, constituency structure, the method of counting, and the final determination of who is elected. David M. Farrell presents the following definition: "Electoral systems determine the means by which votes are translated into seats in the process of electing politicians into office" (1998: 5). André Blais defines electoral systems as "those rules which govern the processes by which preferences are articulated as votes and by which these votes are translated into the election of decision-makers" (1988: 100). According to Lijphart, electoral systems are simply "the sets of methods by which citizens elect their representatives" (1995: 412).

Some words concerning the use of the terms electoral formula and electoral systems also need to be said. In the literature on electoral systems, the term electoral system is frequently used, even though only one of the three basic elements of an electoral system, namely the electoral formula is intended. The incorrect usage of the term electoral system is perhaps due to the common classification of electoral systems on the basis of formula. Another reason might be that some formulas, especially the single-member plurality formula, are widely used in comparison with other formulas of the same electoral system family, and tend to represent the entire electoral system in question. In this study, the term electoral formula is used with reference to those election types that are numbered in table 2.1. Concerning the broad classification of four categories, electoral system is the appropriate term. Electoral system is also used when the relationship between vote and seat shares is in focus, i.e. when a distinction between plurality/majority, semi-proportional and proportional systems is made. Plurality and majority systems are, moreover, referred to as majoritarian systems in cases where no principal difference between those two is intended. Plurality and majority systems are often regarded as the main alternatives to proportional systems, and, as a consequence, it comes natural to use a common term for the former two systems. Once a formula has been presented, the abbreviation of the formula is most often used.

There are two exceptions to the application of formula and system described above. First, the category of list PR contains a large number of countries with different forms of proportional formulas and combinations of other elements, and no list PR systems are exactly alike. List PR is therefore referred to as one form of electoral system rather than a distinct formula. Second, mixed systems are per definition combinations of different formulas, each mixture representing an electoral system of its own.

### 2.1 Elements of Electoral Systems

In a pioneering work, The Political Consequences of Electoral Laws (1967), Douglas W. Rae distinguished between three main components, or phases, of an electoral system: balloting, as a specification of the voter's role in deciding the election; districting, as a limiting factor in the translation of votes to seats; and electoral formula, as a key factor in the translation of votes to seats (1967: 16-39). Lijphart asserts that the three most important properties of electoral systems are the electoral formula, the district magnitude and the electoral threshold (1994b: 1; 1995: 412). The reason for emphasizing the electoral threshold instead of the ballot structure as a basic element is probably its greater effect on proportionality and the party system reported in his studies (see e.g. Lijphart 1994b). As to the construction of a typology of electoral systems, notwithstanding, there seems to be consensus on the criteria to be employed, namely (1) ballot structure, (2) constituency structure and (3) electoral formula (Blais 1988: 102; Blais and Massicotte 1996: 50; Farrell 2001: 6-9; Reeve and Ware 1991: 64-68; Taagepera and Shugart 1989b: 19-36; Taylor and Johnston 1979: 40). These dimensions are relevant to all electoral systems. Other frequently mentioned elements are malapportionment, gerrymandering, apparentment and the electoral threshold. With reference to the effects on proportionality and the party system, Lijphart also regards assembly size and the difference between legislative elections in parliamentary and presidential systems as characteristics of electoral systems (1994b: 10-15). In the following, the elements of electoral systems are described.

### 2.1.1 Ballot Structure

The ballot structure defines how voters express their choice. Rae introduced the distinction between 'categorical' and 'ordinal' ballots. The former asks "the voter to decide which one of the parties he prefers" and the latter allows "the voter to express a more complex, equivocal preference by rank-ordering the parties" (1967: 17). Blais (1988: 104) argues that the ballot structure cannot be reduced to the distinction between categorical and ordinal, because this classification deals with two dimensions at once. One is the number of votes each voter is allowed to cast, whereas the other is the type of information they may provide. First, the number of votes may be either one or equal to the number of candidates, or more than one but less than the number of seats. Second, a piece of information can be nominal, ordinal or numerical. Electoral systems that allow vote splitting without rank-ordering of different parties or candidates are sometimes misleadingly referred to as systems with ordinal balloting (see e.g. Reynolds and Reilly 1997: 23-24).

Moreover, the ballot structure can be classified with respect to the object of the vote, party lists or candidates. Andrew Reeve and Alan Ware (1991: 64) point out that Blais' first dimension, i.e. the number of votes for each voter, can be further divided according to how many ballots the voters are allowed to complete. Norris (2004: 6) distinguishes between four types of ballot structure based on the choices facing citizens in the voting booth: candidate-ballots, preference-ballots, dualballots and party-ballots. Candidate-ballots are used in single-member districts, and citizens cast a single ballot for an individual candidate. In addition to voting for a party, preference-ballots include casting a vote for a particular candidate or candidates within a party list. Dual-ballots are used in mixed electoral systems, which implies that voters cast separate ballots in both single-member and multimember districts. Party-ballots restrict the voter's choice to casting a single ballot for a party.

### 2.1.2 District Magnitude

District magnitude, another term invented by Rae, is defined as the number of seats filled at an election in a district. The electoral constituencies "are the units within which vote totals are translated into distribution of seats" (1967: 19). Reeve and

Ware (1991: 66) point out that there are three basic dimensions to consider as for the constituency structure. Are there on the whole any constituencies? On what basis are the constituencies organized? Are the constituencies single-member or multi-member? Most countries are divided into constituencies but the elections may also be conducted 'at large', which means that the whole country is one single constituency. The constituencies are usually defined territorially, but may also be defined by population groups.

Plurality and majority systems mostly use single-member districts, whereas PR requires a minimum of two seats per district. Within PR systems, however, the number of seats varies a lot between countries and between constituencies within countries. In these countries, the district magnitude is measured by the arithmetic mean of the number of representatives to be elected in each constituency. There may also be two or even more district levels. In addition to the nominal district level, there may be a national district superimposed on the lower-level districts. In Rae's terminology, this phenomenon is called 'complex districting' (1967: 124). The district magnitude is closely related to proportionality. When more seats are being allocated in one constituency, the possibility of allocating seat shares in accordance with vote shares equally increases. Several studies have proved that among the basic characteristics of electoral systems, the district magnitude has the strongest effect on the overall proportionality of election results (Gallagher 1991: 33-51; Jones 1993: 64-66; Lijphart 1994b; Sartori 1986: 53; Taagepera and Shugart 1989b: 112-125).

### 2.1.3 Electoral Formula

The electoral formula determines how votes are translated into seats. There are, broadly speaking, three methods by which votes can be allocated to seats. Seats can be allocated to a candidate or a party winning a plurality of the vote, a majority of the vote, or proportionally among the competitors. In this manner, one may distinguish between plurality formulas, majority formulas and proportional formulas. In addition, some electoral systems combine the proportional formula with the plurality or the majority formula in one election. These are called mixed electoral systems. Despite the large range of voting procedures, all electoral formulas constitute subtypes of these four categories. This study makes use of the traditional approach in classifying electoral systems, i.e. according to electoral
formula, and the variety of electoral formulas are thoroughly dealt with in section 2.2.

### 2.1.4 Additional Elements of Electoral Systems

Electoral thresholds are usually expressed in terms of a minimum percentage of the total national vote that a party needs to win representation. The threshold may sometimes be defined in terms of a certain number of votes or some other criterion such as the winning of a certain number of seats at the lower-level in order to be eligible for seats in higher-level districts. These thresholds are commonly applied at the national level, but may also be applied at the district, or at an in-between, regional level. Plurality and majority systems do not apply electoral thresholds. The reasons for imposing electoral thresholds are foremost to counteract splintering of parties, to limit the number of parties in the legislature, and to render the possibilities for extremist parties to win representation more difficult. Electoral thresholds also affect the proportionality by excluding all votes for parties below the threshold from the final seat allocation. Even in the absence of a legal threshold, an actual threshold is implied by the district magnitude. Electoral thresholds and district magnitudes are, in a sense, rather similar to each other. These two dimensions can be converted into a single operational indicator, the effective threshold, stated in terms of the total national vote. This dimension has a major impact on the degree of proportionality and the party system (Lijphart 1994b: 95-117).

Democratic principle requires that the district magnitude corresponds to the number of voters or people in every constituency. If constituency $A$ has two representatives, then constituency $B$ with twice the population of $A$ should have four representatives. Deviations from this principle is called malapportionment. Especially in majoritarian systems with single-member constituencies, malapportionment is difficult to avoid, because equal districting means that many relatively small constituencies have to be drawn with equal electorates. Malapportionment may systematically favor one or more parties, and introduce an element of disproportionality into the electoral system (Lijphart 1994b: 15; 1995: 418).

Gerrymandering is defined as the deliberate manipulation of district boundaries so as to favor or disfavor particular parties. ${ }^{1}$ It can be used in combination with but also independently from malapportionment, because even when all districts have an equal number of potential voters, it also matters where the district borders are drawn. The problem of gerrymandering is, again, inherent in foremost singlemember districts, and may lead to substantial disproportionality. A different form of gerrymandering is to draw districts in which an ethnic or racial minority is concentrated in order to increase minority representation in the legislature. This is called affirmative gerrymandering (Lijphart 1995: 418; Reynolds and Reilly 1997: 146).

The french term apparentement implies the possibility for separate parties to declare themselves linked for the purpose of seat allocation. Linked party lists appear separately on the ballot, and votes are cast for a single list. Each party's list votes are added and seats are thereafter distributed proportionally as if all candidates on the list belonged to the same party. In a strict sense, apparentement requires multi-member districts and, consequently, appears only in proportional systems. Because almost all PR systems tend to slightly disfavor small parties, the possibility of linked lists gives them a chance to team up and, thus, to reduce their disadvantage relative to the large parties. However, the possibility of forming interparty links is also logically implied under majoritarian systems. Under the alternative vote (as well as under the proportional single transferable vote), the parties may encourage their voters to cast first preferences for their own candidates and the next preferences for candidates of the allied parties. In the United States, a similar kind of cooperation occurs in districts where several small parties decide to support the candidate of one particular party (Lijphart 1994b: 15; 1995: 419).

Lijphart justifies the inclusion of assembly size as a relevant dimension by stating: "if electoral systems are defined as methods of translating votes into seats, the total number of seats available for this translation appears to be an integral and legitimate part of the systems of translation" (1994b: 12). Assembly size is, however, rarely treated as an element of the electoral system, and in my opinion, not relevant to the electoral outcomes and other political consequences. It should

[^0]rather be regarded as a characteristic of legislatures. Seats are allocated at the district level and, in this sense, the assembly is nothing more than the sum of the seat distribution in the constituencies. Possible effects of varying assembly size are most likely attributed to district magnitude and the number of constituencies. In Lijphart's example (1994b: 12-13), four parties win $41,29,17$ and 13 per cent of the national vote in a PR election. He argues that the chances of a proportional allocation improve considerably for a ten-member legislature in comparison with a five-member assembly, and that perfect proportionality could be achieved, at least in principle, for a 100-member legislative body.

However, he mentions nothing about the constituency structure. If the election is conducted 'at large', then the degree of proportionality will indeed increase in the larger assemblies, but this proportionality is totally due to the increase in district magnitude. On the other hand, if the district magnitude is e.g. five in all three legislatures, greater proportionality is probably achieved in the 100 -member legislature than in the smaller ones, but this is, in turn, most likely due to the larger number of constituencies rather than the assembly size. Consider a very small party in a single-member plurality election: the chances of winning a seat are much higher in a 100 -member assembly ( 100 constituencies) than in a ten-member assembly ( 10 constituencies). Hence, the larger the number of districts, the greater the chances of winning a seat. Carsten Anckar likewise suggests that assembly size should not be regarded as a relevant dimension of electoral systems (1998: 171173). By means of theoretically derived arguments, he argues that the district magnitude takes precedence over assembly size in explaining phenomena, which, according to Lijphart, might be related to the size of the legislature.

Form of government is not, of course, an element of the electoral system. Along with the elements described above, nonetheless, Lijphart regards the difference between conducting elections in parliamentary and presidential systems as an aspect of the electoral system (1994b: 14-15; 1995: 419-420). Presidentialism, he says, tend to favor large parties, because only large parties have a realistic chance of winning presidential elections, and this advantage for the large parties tends to carry over to legislative elections, especially if these are conducted at the same time as the presidential elections. Therefore, presidentialism tends to discourage multipartism. Matthew Shugart (1988: 17-29, 116-119) has found similar results: presidential elections conducted by plurality rule and held simultaneously with
legislative elections have a negative effect on the number of parties (in the legislature).

Adjustment seats are rarely mentioned as a basic element of electoral systems, although a considerable share of the PR systems in the world comprises seats reserved for allocation outside the basic electoral districts, most often at the nationwide level. Two kinds of adjustment seats are usually distinguished: compensatory and additional seats. The allocation of compensatory seats takes into account all parliamentary seats. On the basis of the nationwide (or regional) vote, the overall seat shares for each party are calculated. The seats already won at the district level are subtracted, and disadvantaged parties are compensated for the difference. If there is a sufficiently large number of compensatory seats, the final seat allocation corresponds to the vote shares. The allocation of additional seats concerns only the extra seats. On the basis of the nationwide (or regional) vote, remainder seats are allocated irrespective of who got how many direct seats in the districts. In some countries, remainder seats for remainder votes are allocated. Such allocation is calculated on the basis of those votes, which remain unused in quota distribution in the districts (Taagepera and Shugart 1989b: 129-133).

### 2.2 Electoral Formulas - A Presentation

In the following, all electoral formulas that have been used between 1945 and 2003 for elections to the lower (or only) legislative chamber in independent countries are described. Although there has been, and still is, a large range of electoral formulas in operation, and theoretically an almost limitless supply of alternatives, in essence they break down into the three main families of plurality, majority and proportional electoral systems. The description of electoral formulas is carried out in accordance with this disposition, and all elections that combine PR formulas with the plurality or the majority rule constitute the fourth family of electoral systems. A detailed presentation of electoral formulas is provided, because a proper classification of formulas into a few main categories is not self-evident. On the contrary, several different classifications have been suggested, and every categorization must be justified by some criteria. An appropriate classification cannot be conducted without making a survey of all existing formulas and their main features. Furthermore, the presentation of electoral formulas and systems, as well as grounds of classification, serves a descriptive purpose.

### 2.2.1 Plurality Systems

### 2.2.1.1 Single-Member Plurality

In a plurality system, the candidate or party with the largest number of votes wins, irrespective of the proportion of the total vote. In contrast to majority systems, it is possible to win an election without winning a majority of the votes. The most common plurality formula is the single-member plurality formula, also called, among other things, 'simple majority', 'relative majority' and 'first past the post'. In the present study, the term single-member plurality (SMP) is used, because it comprises the main features of the formula, and distinguishes it from other plurality formulas. Only single-member constituencies are used, voters are given one vote each, and the candidate or party with a plurality of the total vote is elected. In a historical sense, SMP is associated with the United Kingdom. The single-member constituency was introduced into Britain in 1707, but it did not become the general basis of representation until 1885 (Bogdanor 1983: 3; Lakeman and Lambert 1954: 25). The plurality system had earlier operated mainly in twomember districts. Vernon Bogdanor (1983: 3) points out that before SMP became a norm in Britain, it was already the predominant basis of representation in the United States, Canada, Australia and New Zealand.

The great advantage of this formula is that it produces firm government, or, in any case, that it is much more likely to do so than PR systems (see e.g. Blais and Massicotte 1996: 73-75; Lijphart and Grofman 1984b: 5-7). By discriminating against small parties, it often provides a clear-cut choice for voters between two main parties, which, in turn, gives rise to single party governments and a coherent parliamentary opposition. It also restrains extremist parties from receiving parliamentary representation. Moreover, SMP is defended on grounds of simplicity and geographic accountability, i.e. the link between constituents and their representatives created by small constituencies, as well as the choice between candidates rather than between parties. The basic demerit of SMP is the disproportional seat allocation, which leads to under-representation of small parties, minorities and women. Because of the disproportionality, SMP elections also produce a large number of 'wasted' votes; i.e. votes cast for unsuccessful parties and/or candidates. Finally, gerrymandering and malapportionment often
occur in systems with a large number of small constituencies (Reynolds and Reilly 1997: 28-31).

### 2.2.1.2 Block Vote

The block vote (BV) is simply the application of the formula described above in multi-member districts. The electors vote for individual candidates (or parties), and the number of votes per elector corresponds to the district magnitude. In most countries that apply BV , voters are free to use as many, or as few votes as they wish. The victors are those candidates winning a plurality of the votes in the district. The merits of this formula are that, despite the larger districts than SMP applies, it retains the voter's ability to vote for individual candidates. Moreover, it strengthens those parties that demonstrate most coherence and organizational ability (Reynolds and Reilly 1997: 36). The merits are, however, overshadowed by the demerits: in deciding which candidates the voters prefer, they usually cast all their votes for the candidates of a single party, which implies that all the disadvantages of the SMP are exaggerated, especially the disproportionality of the election outcomes. The maxim that the larger the district magnitude, the greater the degree of proportionality, is, hence, reverse in the case of the block vote.

Reynolds and Reilly regard BV and the party block vote (PBV) as two different categories of electoral systems. The distinctive feature of the party block vote is that voters choose between party lists of candidates rather than individuals. All seats in a district are given to the party with a plurality of the total vote. The main advantage of this formula is that it may allow for balanced ethnic representation by giving the parties the opportunity to present ethnically diverse lists of candidates, thereby facilitating minority representation. PBV in its pure form is applied, according to Reynolds and Reilly, in Lebanon and Djibouti (1997: 36-37). However, the distinction between BV and PBV is in practice quite blurred. In Lebanon for instance, the electors are free to vote for candidates from several parties, and, thus, compose their own list of candidates despite the use of party lists. A candidate is considered elected if he or she receives the largest number of votes in his or her constituency among the candidates running for the same religious sect (Scheffler 2001: 178). ${ }^{2}$ The electoral system in Lebanon is actually a

[^1]mixture of BV and PBV. In my classification, I shall apply one single category of block vote formulas.

### 2.2.1.3 Single-Member Plurality - Block Vote

Some countries apply the plurality rule in both single-member and multi-member districts - Reynolds and Reilly (1997: 139-142) identify five countries in the world that combine SMP and BV according to electoral laws in 1997 or in the last competitive elections held. However, most authors ignore the distinction between plurality in single-member districts and the combination of plurality rule in singlemember and multi-member districts; simply regarding them all as plurality systems. ${ }^{3}$ Nevertheless, I consider it necessary to treat this mixture of plurality formulas as a category of its own for the following reason. The detailed classification of electoral formulas and systems serves partially an informative and a descriptive purpose. BV is therefore separated from the very popular SMP, which is frequently praised and criticized for its merits and demerits. Because plurality elections in single-member and multi-member districts are separated from each other, elections that use both fit into neither of them. A further criterion of SMPBV is that at least 10 per cent of the representatives are elected under a formula different from the one used for the election of other representatives.

### 2.2.1.4 Limited Vote and Single Non-Transferable Vote

The limited vote (LV) is a plurality formula that uses multi-member districts, in which each voter has fewer votes than there are representatives to be elected. When each voter has only one vote, the limited vote is called the single non-transferable vote (SNTV). In accordance with the plurality rule, the winners are those candidates with the largest vote shares. The limited vote appeared for the first time in debates on the (British) Reform Bill in 1831 and 1832 (Lakeman and Lambert 1954: 75). It was later on applied in British elections between 1867 and 1885 (Farrell 2001: 45). Italy, Portugal and Spain also used this formula in national elections in the late nineteenth century and the early twentieth century. Thereafter it has gained very little support. During the second half of the last century, no national legislative (lower) chamber has been elected by the limited vote (with

[^2]more than one vote per elector). SNTV has usually been associated with Japan, which used this formula for the last time at the national level in 1993.

The lack of popularity may be attributed to its few advantages in comparison with the disadvantages. Because of the multi-member districts, LV is better able to facilitate minority representation and produces a more proportional seat allocation than SMP. It also has some other advantages claimed for plurality, especially its simplicity and the fact that voters vote for candidates. On the negative side, LV does not guarantee proportional seat allocation despite its more proportional profile compared with SMP. Another drawback, inherent particularly in LV, is that each party's candidates are to some extent running against each other, and may thereby accentuate party fragmentation and discord. In several districts, there is a high level of uncertainty as for the outcome because the total vote share needed for victory is unknown. Nominating too many candidates can be as disastrous as nominating too few. A major party has to discipline its voters into spreading the votes equally across the party's candidates, whereas a middle-sized party is faced with the dilemma of putting up one candidate and by that, secure one seat, or putting up several candidates and, thereby, run the risk of being left without representation (Bogdanor and Butler 1983: 33; Reynolds and Reilly 1997: 51-52). In Michael Dummett's opinion, LV has very little merit and often leads to erratic results: "it is not difficult to construct examples in which the candidates who would be elected when the voters are restricted to casting two votes would not be elected if they were permitted to cast three" (1997: 126).

Because of its higher degree of proportionality than that of the majority and the other plurality formulas presented so far, but considerably less than that of PR systems, LV is usually called a semi-proportional system (see e.g. Farrell 2001: 45; Lakeman and Lambert 1954: 74-78; Reynolds and Reilly 1997: 51-52). By examining the operation of LV and SNTV in Spain (upper house) and Japan, Lijphart, R. Pintor and Y. Sone prove that in their consequences, these formulas are somewhere between SMP and PR (1986: 154-169).

### 2.2.1.5 Cumulative Vote

The cumulative vote ( CV ) is another plurality formula considered as semiproportional (see e.g. Farrell 2001: 45; Lakeman and Lambert 1954: 79-81;

Weaver 1984: 198-199). CV implies that the voters are granted as many votes as there are members to be elected, but in contrast to BV, the voters are allowed to cast two or more votes for a single candidate. Like LV, it makes life a bit easier for smaller parties and offers better minority representation than other plurality formulas. It was applied for the first time in the Cape Colony in 1856 (Lakeman and Lambert 1954: 79), and has never gained any great support, at least not at the national level. The first legislature of independent Barbados (1966-71) was elected under CV. However, the elections were conducted 27 days prior to independence, and on the day of independence, SMP was adopted. In a strict sense, CV has not been used in legislative elections during the second half of the twentieth century.

### 2.2.2 Majority Systems

For a candidate to be elected in a majority system, he or she must obtain at least 50 per cent of the total vote. There are basically two kinds of majority elections: the alternative vote and the double-ballot, also called 'majority run-off', 'two-ballot', 'second ballot' and 'two-round system' (Duverger 1964: 239; Lijphart 1994b: 10; Reeve and Ware 1991: 67; Reynolds and Reilly 1997: 43). In a few (authoritarian) countries, the electoral law requires a majority for victory, although no second round is conducted. Within the framework of the present study, the distinction between majority elections in one round and two rounds is of no considerable importance but rather observed on grounds of preciseness. A one-round majority election is not a run-off election, and definitely not an alternative vote election. In order to keep up a consequent terminology, I shall call this formula one-ballot majority (OBM), and, consequently, use the term two-ballot majority (TBM) for majority elections in two rounds.

### 2.2.2.1 One-Ballot Majority

Requiring a majority instead of a plurality involves the risk of having no winner at all in a single-round election with several candidates. Hence, it is obvious that this formula is only applied in countries with non-competitive elections. In Cuba, for instance, a candidate must obtain more than 50 per cent of the valid votes cast in the constituency. If none of the candidates receives a majority, the seat in question remains vacant [http://www.ipu.org/parline-e/reports/2079_B.htm]. The Council of State may, however, decide to hold another election - not to be confused with a
run-off election between the most successful candidates in the first round. In practice, the number of candidates corresponds to the size of the legislature and all seats are naturally filled. In North Korea, a similar system is applied. An absolute majority of all votes in a constituency is required for election to the Supreme People's Assembly. The election is valid if more than 50 per cent of the electors in a given constituency have voted for the sole candidate [http://www.ipu.org/parlinee/reports/2085_B.htm].

### 2.2.2.2 Two-Ballot Majority

The two-ballot formula implies that if one candidate obtains a majority of the votes in the first round, he or she is elected. If no one attains 50 per cent of the total vote, a second round of voting is conducted usually within one or two weeks. Singlemember districts are normally used, but multi-member districts have also been applied. In the latter case, electors have several votes at their disposal. There are basically two variants of TBM: the majority run-off formula and the majorityplurality formula. In majority run-off elections, the second ballot is held between the two candidates who got the highest number of votes in the first round. The majority-plurality formula, on the other hand, does not require such a drastic reduction in the number of contestants on the second ballot - the winner is the candidate who gets a plurality in the second round of voting. A threshold is, however, usually imposed for candidates to stand at the second ballot. The typical example of this formula is the French system, which applies a minimum of 12.5 per cent of the total vote (not of those who voted but of the registered voters) for participating on the second ballot. Once there are more than two candidates in the second round, there is of course no guarantee of a majority result, which raises the question of whether the French variant of the two-ballot formula belongs to the plurality family rather than the majority one. Nevertheless, the majority-plurality formula has been, almost invariably, regarded as a majority formula (e.g. C. Anckar 2002: 15; Blais and Carty 1987: 209-218; Farrell 2001: 52; Lijphart 1994b: 18; Rae 1967: 23). Duverger (1964: 239-245), on the other hand, uses the term 'simple majority' for the French second ballot system, which refers to the plurality terminology, and a simple majority is indeed the basic requirement for victory in the second round. However, candidates who manage to receive the minimum percentage of votes in the first round without any realistic chances of winning the
total election, often pull out of the race anyway so as to increase the chances for a particular candidate from a coalition party.

In the beginning of the twentieth century, TBM was used as a transitional formula in the switch from plurality to proportional elections in several countries, among them Austria, Belgium, Italy, the Netherlands, Norway and Spain (Flora et al 2000; Mackie and Rose 1974). France adopted TBM (majority run-off) for legislative elections in 1789. In comparison with the plurality rule, two basic merits are usually attributed to the two-ballot formula. First, it makes it more likely that the representatives are accepted by a majority of the voters at the constituency level, thereby also enhancing the legitimacy of government. Due to the majority criteria, this formula is often said to be at the heart of democracy. Second, the majority principle weakens extremist parties, even when they are relatively large (Blais 1991: 246-247; Lijphart and Grofman 1984b: 10). Another advantage is the opportunity for voters to have a second choice for their chosen candidate, or to change their minds between the first and the second rounds. Furthermore, it encourages diverse interests to coalesce behind potential winners in the second round, thereby encouraging bargains and trade-offs between competitors (Reynolds and Reilly 1997: 44). The disadvantages are basically the same as those of SMP. An additional drawback is the pressure on the electoral administration and the financial burden caused by having to run a second election.

### 2.2.2.3 Alternative Vote

The alternative vote (AV), devised by W.R. Ware in the 1870s and also known as preferential voting, is the other basic type of majority systems. A version of this formula was used for the first time in the state of Queensland (Australia) in 1892. Under AV, the electors are asked to indicate their first and alternative preferences among the candidates on an ordinal ballot. In order to win, a candidate must obtain more than 50 per cent of the votes. If no candidate has received a majority, the candidate with the lowest number of first preferences is eliminated. The votes of those who ranked him highest are then transferred to the second preferences expressed by the voters. Those ballot papers, on which no other candidates were
given ranking, are set aside. This process is repeated until a candidate receives majority support. ${ }^{4}$

This formula is usually associated with Australia. In Australian elections, the voter has to rank order all candidates; otherwise the ballot is rejected (Farrell 2001: 56). AV is regarded as superior to the plurality system, because it gives an opportunity for the voter to register all his preferences. Furthermore, if all voters rank all candidates, a 'Condorcet loser' cannot be elected, which may often happen in plurality elections. ${ }^{5}$ AV is also seen as an improvement on TBM by reducing the opportunity for tactical voting. In a two-ballot election, a voter may, for tactical advantage, vote inconsistently in successive ballots, but this is impossible when voters' preferences are expressed on a single ballot (Dummett 1997: 90-91). Moreover, AV enables supporters of candidates with no realistic chances of being elected to influence, via their second and later preferences, the election of a major candidate (Reynolds and Reilly 1997: 38). For the same reason, few votes can be regarded as 'wasted'. In contrast to other majoritarian formulas, AV may encourage moderation between rival groups in ethnically divided societies. It provides parties with incentives to 'vote pooling', i.e. to campaign for the second preferences of those electors who voted with their first preference for other parties (Horowitz 1991; Reilly 1997: 1-11).

Richard J. Johnston (1984: 63-64) brings out a major disadvantage of the AV formula: if a political party gets, for instance, 40 percent of the first preference votes, but those who do not rank the party first, rank it last, then it may not win any seats. This presupposes that the party obtains 40 percent of the votes in each district, but the greater the number of districts in which this constellation prevails, the greater the extent to which the party will be under-represented. Another

[^3]disadvantage is that it presupposes a reasonable degree of literacy and numeracy to be used effectively. Like all other single-member systems, AV suffers from disproportional seat distribution and vulnerability to gerrymandering and malapportionment (Reynolds and Reilly 1997: 38). However, Reilly (2001: 176) argues that the common way of assessing proportionality on the basis of first preferences offers a misconceived and misleading interpretation of the true relationship between seats and votes. Like Michael Gallagher (1986), he suggests that the final vote count should be used for measuring the proportionality of AV.

### 2.2.3 Proportional Systems

### 2.2.3.1 List PR

The principle of the proportional method - often simply called PR - is that the share of seats awarded to each party should be equal to the share of votes. The preferences of the electorate should be mirrored in the legislature. There are two basic types of proportional elections: list systems and the single transferable vote. ${ }^{6}$ In list systems, each party presents a list of candidates in each constituency. The number of candidates on the list depends on the number of seats to be filled. Electors vote for a party, and the proportion of votes for each party determines the seat allocation. Winning candidates are normally taken from the lists in order of their position on the lists. In addition to the party vote, some list systems also include an element of preferential voting. The district magnitude varies a lot between PR countries: Chile, for instance, applies two-member constituencies, whereas Israel and Guyana, among others, apply nationwide constituencies. ${ }^{7}$ Two main seat allocation formulas have been used: the highest average and the largest remainder. The former determines the seat allocation by division, whereas the latter does so by subtraction.

[^4]Under the highest average system, each party's votes are divided by a series of divisors to produce an average vote. The party with the 'highest average' votes after each stage of the process wins a seat, and its vote total is then divided by the next divisor. The process continues until all seats have been filled. This system is further divided into different subtypes according to the divisor sequence. The d'Hondt method employs the divisor sequence 1, 2, 3, 4 etc., whereas the SainteLaguë method uses the odd-integer divisor series $1,3,5,7$ and so on. In practice, the Sainte-Laguë formula is employed only in a modified form, using 1.4 instead of 1 as the first divisor.

The central feature of the largest remainder system is an electoral quota by which seats are allocated to parties. The first step of the process is to calculate a specific quota on the basis of the total valid vote and the district magnitude. In the first round of the seat allocation, parties get as many seats as they have quotas of votes. In the second allocation, the parties left with the greatest number of votes after subtracting the quotas are awarded the remaining seats in order of vote totals. The three most common largest remainder formulas are the Hare, Droop and Imperiali quotas. The Hare quota is calculated by dividing the total valid vote in a constituency by the number of seats. The Droop quota (often referred to as the Hagenbach-Bischoff quota) is produced by dividing the total number of votes by the number of seats plus one, and the Imperiali quota is calculated by dividing the total valid vote by the number of seats plus two.

In the late nineteenth century, pressure towards more proportional seat distribution was felt in several Western European countries. First, the regimes were eager to counteract potential threats to national unity and political stability by providing better minority representation. Second, the established parties feared that they would lose everything under the existing majoritarian systems when the working class gained access to the legislatures. As a consequence, they demanded a change to PR (Lijphart 1991a: 75). In 1899, Belgium became the first country to adopt a list system of proportional representation (d'Hondt), followed by Finland in 1906 and Sweden in 1907 (Farrell 2001: 71).

The strongest argument for list PR, in comparison with majoritarian systems, is that it provides a more representative legislature with respect to the preferences of the electorate. An accurate representation, in turn, promotes representation of small
parties and minority groups. Furthermore, list PR usually produces a larger share of female legislators than majoritarian elections. In order to maximize their total vote, parties are consequently encouraged to present inclusive and socially diverse lists of candidates. Another benefit of PR is that few votes are 'wasted'. Finally, it encourages large majority policy-making and makes power-sharing between parties more visible, because proportional elections rarely lead to a parliamentary majority for one party. PR is, on the whole, regarded by many as more democratic than the plurality and the majority system (Dunleavy and Margetts 1995: 17; Reynolds and Reilly 1997: 62-65).

A great deal of the criticism of list PR is concerned with the disadvantages of coalition governments. Quick and coherent decision-making may be impeded by broad coalitions with insufficient common ground, and legislative gridlock is much more imminent than in majoritarian systems. In addition to governmental stability, PR governments are often accused of non-alternation: when they are dissolved and new elections are called for, the same parties return to power. Another major drawback is the weak linkage between a representative and his or her electorate. When legislators are elected in large constituencies, voters have little ability to determine the identity of those who will represent them. Furthermore, list PR leads to fragmentation of the party system, and, as a consequence there of, prevents the voters from expressing a clear choice for a governmental team. PR also makes it easier for extremist parties to gain representation (Lardeyret 1991: 31; Reynolds and Reilly 1997: 65-66).

Despite the great variety of PR formulas and the large number of countries with PR systems, I shall lump them all together in one single category of list systems. This may seem odd considering the fact that I apply different categories for different plurality formulas. The differences between different plurality formulas are, however, more manifest than those between different PR formulas. First, LV and SNTV are usually regarded as semi-proportional systems, whereas BV is considered even more disproportional than SMP. The PR formulas also differ with regard to vote-seat ratios but these patterns are blurred by the varying application of electoral thresholds, district magnitude, and adjustment seats. Second, the absence of electoral thresholds and complex districting within plurality systems makes these systems more pure than the PR systems, which combine a lot of different elements. Third, each proportional formula allows a great variety
concerning the ballot structure in contrast to the plurality ones. Each plurality formula is characterized by a specific ballot structure, which, at the same time, constitutes a feature that distinguishes different plurality formulas from each other.

### 2.2.3.2 Single Transferable Vote

Of all electoral formulas used for legislative elections, the single transferable vote is often regarded as the most complex one. This formula was independently invented in the mid-nineteenth century by Thomas Hare in the United Kingdom and Carl Andrae in Denmark (Reynolds and Reilly 1997: 83). Like AV, STV applies preferential voting, and the electors can vote for as many, or as few candidates on the ballot paper as they wish. Electors are, however, advised to declare as many preferences as possible, so as to maximize their influence on the final election result. Since STV is a proportional formula, it operates, in contrast to AV, with multi-member districts.

Candidates are elected if they receive a specific quota (Droop) of the total vote in a constituency. This quota is calculated by dividing the total number of valid votes by the number of seats to be allocated plus one, and rounding upwards or adding one. The first stage of the counting process involves the sorting of all ballot papers according to the first preferences of the voters. Any candidate who has attained a number of votes equal to or greater than the quota is immediately elected. At the next stage, all surplus votes of those candidates already elected, i.e. the number of votes by which the quota is exceeded, are transferred to the remaining candidates according to the second-preference on the ballot paper. If no candidate has attained the quota, the candidate with the lowest number of first preferences is eliminated, and his or her second preferences are redistributed to the other candidates. At each stage, every candidate that attains the quota is declared elected. The transfer of the surplus votes of winning candidates and the votes of eliminated candidates, based on second, third, fourth preferences and so on, continues until all seats in the constituency are filled.

According to Peter Mair, STV has three considerable merits: candidate accountability, proportional outcomes and stable governments (1986: 292-299). Due to the preferential voting in rather small multi-member districts, STV has the advantage of individual accountability usually associated with SMP, while
simultaneously avoiding disproportional seat allocation between parties. Like list PR, STV facilitates minority representation, and makes it more likely that women are elected. The third merit, governmental stability, is mainly based on evidence from Ireland. A further merit is the little number of 'wasted' votes. The elector can safely vote his or her real order of choice without worrying about any later choice affecting an earlier choice; no later choice is ever counted unless and until all earlier choices are elected or defeated. There is, consequently, no need for tactical voting. Moreover, STV provides a better chance for the elections of popular individual candidates than list PR .

Because of voting for individuals instead of party lists, STV needs rather small districts in order to function well. In large entities, STV may be utterly unworkable, since the ballot would be huge and so would the number of candidates with whom voters would have to be familiar. Another drawback, caused by the preferential voting, is that candidates of the same party are also competing against each other, and the system may, thus, increase fragmentation within parties. With evidence from Ireland, Mair points out that STV is vulnerable to gerrymandering: borders between constituencies have been redrawn, equal electorates have been given unequal numbers of seats, and the district magnitude has been manipulated in order to maximize partisan advantage (1986: 299-300). Finally, STV is often criticized on grounds of complexity, and that the system demands a certain degree of literacy and numeracy (Reynolds and Reilly 1997: 84).

### 2.2.4 Mixed Electoral Systems

Before the 1990s, the category of mixed electoral systems was associated with one democratic country only, West Germany. Its electoral system was given a range of different titles, e.g. 'additional member', 'mixed member proportional', 'compensatory PR', 'personalized PR', and 'two-vote' (Farrell 2001: 97). For a long time, Blais and Louis Massicotte write, mixed systems were "dismissed as eccentricities, transitional formulas, or instances of sheer manipulation doomed to disappear" (1996: 65). This opinion is principally due to the fact that mixed systems had been, with a few exceptions, applied only in countries without any record of democratic longevity. Since the early 1990s, however, mixed systems have become quite fashionable, and, according to another study by Massicotte and

Blais, no less than 29 countries, totaling about one-fifth of the world's population, currently use some form of mixed system (1999: 341).

In their detailed survey of all mixed electoral systems in the world since the beginning of the twentieth century, the authors define mixed systems as involving "the combination of different electoral formulas (plurality or PR; majority or PR) for an election to a single body" (1999: 345). Massicotte and Blais identify five different ways of combining PR with either plurality or majority. These are called superposition, correction, coexistence, fusion and conditional. In addition, there are a few countries that use super-mixed electoral systems, which implies that PR and plurality or majority formulas are combined in more than one of the five basic ways.

Before describing the functioning of these mixed systems, I shall discuss another comprehensive study of mixed electoral systems, conducted by Shugart and Martin Wattenberg (2001). In their volume Mixed-Member Electoral Systems: the Best of Both Worlds, all major countries that have adopted mixed systems are examined. By way of introduction, they argue that the definition of a mixed system by Massicotte and Blais is too broad, mainly because it includes countries that employ majoritarian formulas in some parts of the country while using PR in other areas. Their preference is for a narrower definition in which mixed systems are seen as a subset of the two-tier electoral systems used in some PR countries. The distinguishing feature in mixed systems is that one tier must allocate seats nominally, and the other tier must allocate seats by lists. Nominal voting implies that electors vote for candidates by name, and seats are distributed to individual candidates on the basis of the votes they obtain. ${ }^{8}$ Seat allocation by lists corresponds to the voting procedure in list PR systems. Normally, each voter casts separate votes in each tier - a nominal vote and a list vote. In some countries, however, the voter casts only a nominal vote. In such cases, the nominal votes determine the allocation of seats in the list tier (2001: 10-11).

The combination of a nominal and a list tier implies a combination of the majoritarian and the PR principles in one electoral system. In this respect, Shugart and Wattenberg's notion of a mixed system does not differ from that of Massicotte

[^5]and Blais. They also agree that the most basic distinction between different mixed systems is the presence or absence of a linkage between the tiers, or in Massicotte and Blais' terminology, whether the application of one formula is dependent on the outcome produced by the other formula or not. Their classifications of subtypes, however, differ somewhat from each other.

Shugart and Wattenberg (2001: 13) point out that most mixed systems tend to lean towards either a majoritarian or a PR system in their overall effects, and the basic subtypes are therefore called mixed-member majoritarian (MMM) and mixedmember proportional (MMP). If there is no linkage between the tiers, part of the seats is allocated according to the majoritarian rule, and the remainder is proportionally distributed. The seat allocation or votes cast in the nominal tier does not affect the allocation of seats in the list tier, which implies that the overrepresentation of large parties due to the majoritarian rule will also be reflected in the final seat distribution. Owing to the proportional element, however, the majoritarian boost for large parties will probably not be as large as it would have been in a pure plurality/majority election. Therefore, MMM systems are usually classified as semi-proportional systems (see e.g. C. Anckar 2002: 13; Lijphart 1999: 145; Reynolds and Reilly 1997: 51-56). In MMP systems, on the other hand, any disproportionality in the nominal tier is corrected in the list tier. As to the final seat distribution between parties, hence, MMP systems correspond to list PR.

An electoral system that has no ambition to correct for any disproportionality in the nominal tier is in Shugart and Wattenberg's terminology called parallel. This system undoubtedly belongs to the category of MMM systems. Concerning those systems in which the tiers are linked to each other, the authors make a distinction between seat linkage and vote linkage. Systems with seat linkage are further divided into compensatory and majority-assuring systems. Systems in which the list tier compensates parties for the disproportionality obtained in the nominal tier clearly belong to the MMP category. The majority-assuring system, on the other hand, assures the most successful party in the nominal tier, irrespective of its vote share, a majority of all seats in the legislature. This formula may also involve an upper limit of seats the winning party may receive. Another peculiarity, applied e.g. in Mexico in the 1988 election, is the application of rules that over-represent both the largest and the smallest parties, and under-represent the medium-sized parties. This formula may at times be quite proportional but because of the
majority-assuring feature, Shugart and Wattenberg regard it basically as a MMM system (2001: 14, 209-230).

Another form of correction applies in systems, in which votes cast for party lists are adjusted by the transfer of votes from the nominal tier. Hungary and Italy apply this formula but in different ways. In Hungary, votes cast for unsuccessful candidates in the nominal tier are added to their parties' list of votes. In Italy, on the other hand, parties' list votes are reduced to account for successful candidates in the nominal tier (2001: 15). Shugart and Wattenberg classify these cases as MMM systems, because "even if a party is over-represented in the nominal tier relative to its vote share, it is still likely to receive a significant share of the list-tier seat" (2001: 16). In their typology of mixed-member system, this formula is called 'MMM with partial compensation'.

Massicotte and Blais apply a different classification. Their distinction between a dependent and an independent mixture of formulas corresponds to the presence and absence of a linkage as described above. The authors do not, however, distinguish between seat and vote linkage but between corrective and conditional systems. Concerning the independent combination, there are three subtypes: coexistence, superposition and fusion (1999: 347). In corrective systems, PR seats are allocated so as to correct the disproportionality created by the majoritarian rule. However, a difference between compensatory and majority-assuring formulas is not made, which implies that this category contains, in Shugart and Wattenberg's terminology, both MMP and MMM systems. Moreover, there are a few countries, in which the PR seat allocation only partially compensates for the distortion created by the majoritarian seat allocation (1999: 353-354). In the Tunisian 1994 elections, for instance, 144 seats were allocated under the block vote in 25 multimember districts, whereas 19 seats were allocated proportionally to unsuccessful lists (Pereira 1999: 915). It is obvious that the 19 compensatory seats do not sufficiently compensate for the distortion created by the highly disproportional BV in the nominal tier. ${ }^{9}$

[^6]Whether one formula applies or not in conditional systems depends on the outcome produced by the other formula or the vote distribution. The second formula comes into play only if the outcome of the first formula, as specified by the electoral law, does not meet a certain condition or if the leading party (or cartel) fails to get a certain vote share. With the exception of some super-mixed systems, there are only historical instances of conditional systems. In the Italian 1953 elections, for instance, 380 of the 589 seats were awarded to a cartel having a majority of the national vote, whereas the remaining seats were distributed proportionally among the other parties. If the leading cartel failed to get 50 per cent of the vote, all seats were proportionally allocated. In the 1920s and the 1930s, conditional systems were also applied in some French and Romanian elections. In these cases, the 'conditional rule' was employed at the constituency level (Massicotte and Blais 1999: 357-358). The largest parties are most likely favored in a conditional system. The majoritarian boost received by large parties in some districts is not likely to be wiped away by proportional seat distribution in districts with stiffer competition.

An independent combination implies that the outcome produced by one formula does not affect seat allocation by the other formula. In the first type, called coexistence, part of the seats is filled by plurality or majority elections, while the other part is filled by PR elections. The division into two parts usually corresponds to single- and multi-member districting. The distinguishing feature in comparison with the parallel systems described earlier is that seats are allocated in one single tier only. Therefore, this system does not fulfil Shugart and Wattenberg's criterion of a mixed system. Nevertheless, the application of both plurality/majority and PR elections in one tier fits into none of the three main categories of electoral systems, which justifies the classification of this system as mixed (Massicotte and Blais 1999: 347-348). Unless the share of legislators elected by plurality/majority is not very small, large parties are likely to be over-represented in elections under the coexistence system.

The second type of independent combination, called superposition, corresponds to the parallel systems in Shugart and Wattenberg's typology. In contrast to the first type of independent combination, both majoritarian and PR elections in separate tiers apply throughout the territory to all voters (Massicotte and Blais 1999: 347). Massicotte and Blais identify 14 existing systems that fit into this subtype of mixed systems (1999: 350-351).

In the third type of independent combination, both formulas are used within each single district: some seats are allocated by the majoritarian rule and others are proportionally distributed. The authors point out that this system, called fusion, currently exists only for French municipal elections. If a party list receives a majority of the vote, it gets half of the seats. The other half is allotted under PR among all parties, including the leading party. If no list obtains a majority, a second round is conducted. This time, half of the seats are awarded to the party with a plurality of the vote, and the remaining seats are proportionally distributed among all parties (1999: 352). In contrast to the 'winner takes all' -feature of the SMP formula, this hybrid may be described as 'winner takes the lion's share'.

Some mixed systems fit into none of these five basic types, because plurality/majority and PR are combined in more than one way. The Hungarian system, for instance, is a combination of superposition and correction. Three tiers are employed: an independent combination of the first and the second tier is further combined with 58 national compensatory seats in the third tier (Massicotte and Blais 1999: 357). The authors observe four existing super-mixed systems.

I have presented two classifications of mixed-member electoral systems and they are both useful. However, considering the purpose of the study, I regard the typology by Massicotte and Blais as more appropriate. The distinction between MMM and MMP systems in Shugart and Wattenberg's classification is concerned with one specific feature, namely the consequences of these systems in terms of disproportionality. As mentioned earlier, the classification of electoral systems in this study should be as neutral as possible, and Massicotte and Blais' typology fulfils this criterion to a greater extent. In studies of electoral systems and their effects, a distinction between MMM and MMP may be justified but not here.

Concerning the matter of electoral system choice, I regard the feature of combining the plurality/majority rule with proportional seat allocation as more profound than the fact that some mixed systems produce proportional results, whereas others are semi-proportional in character. I shall, accordingly, classify all systems that combine these rules as mixed electoral systems. Besides, the extent to which some systems compensate for the disproportionality in the nominal tier varies, which makes the classification into either semi-proportional or proportional more
difficult. Even an independent combination may produce quite proportional results, if the number of representatives elected by PR is much larger than the number of representatives elected under the majoritarian rule. To identify electoral systems as majoritarian, semi-proportional and proportional will be further discussed in the next section.

Another reason for preferring Massicotte and Blais' typology to that of Shugart and Wattenberg is their different notion of the combination of plurality/majority and proportional elections in one single tier. I maintain that these systems necessarily must be classified as mixed simply because two different election principles are applied, provided that both methods are used to some considerable extent. Any other classification is faulty, since the electoral system by which part of the legislature is elected would be disregarded.

The extent to which two or several formulas are applied in mixed systems naturally varies a lot, and a threshold must be specified. If there is a diminutive number of representatives elected under a formula different from the predominant formula, the system can hardly be regarded as a mixed system. In Spain for instance, two of 350 deputies are elected by plurality but the electoral system is notwithstanding classified as a PR system (Flora et al 2000: 825). Neither Switzerland applies a mixed system, according to definitions in the literature, although five of 200 seats are allocated by the plurality rule (2000: 908). Massicotte and Blais (1999: 345) propose the following threshold: for a system to be classified as mixed, at least 5 per cent of the seats must be allocated by a formula different from the one used for the other seats. In my opinion, this threshold is very low. For instance, the electoral system in Niger, adopted in 1993, is classified as mixed, because there are eight special single-member districts to ensure the representation of national minority communities (plurality rule), in addition to an equivalent number of multi-member districts with eight members each (PR). The PR system adopted in Cambodia in 1992 under strong UN influence would also be classified as mixed according to the 5 per cent criterion, because eight legislators of totally 120 ( 122 members in the 1998 elections) were elected by plurality in single-member districts in the 1993 elections. However, the authors have not observed the Cambodian electoral system. Considering the quite proportional election results in the 1993 Cambodian elections and the 1995 Nigerien elections, I shall use a threshold of 10 per cent
rather than 5 per cent in distinguishing between mixed and other types of electoral systems.

Lastly, a few words about the advantages and disadvantages of mixed systems are added. Provided that there are enough PR seats, mixed systems offer facilities for minority representation while simultaneously providing a seat bonus for the largest parties. Despite better opportunities for small parties, the party system will probably not be as fragmented as those produced by pure list systems. The major advantage of mixed systems that compensate for the disproportionality in the nominal tier is that, while retaining a proportional seat allocation in accordance with the preferences of the electorate, they ensure geographical representation of voters. In addition, this system offers the same benefits as pure list systems, such as minority representation and the composition of socially diverse lists.

On the other hand, all mixed systems are marred by the same disadvantages as plurality/majority and list systems respectively, despite those mentioned above. Another drawback, inherent in all mixed systems, is that two classes of representatives may be created: one group elected from the single-member districts beholden to its local electorate, and a second group elected from party lists beholden to their party leaders (Reynolds and Reilly 1997: 56, 74-75). While the advocates argue that it brings together the best of both worlds, Sartori describes the mixed system as "a bastard-producing hybrid which combines their defects" (1994: 75). He stresses that electoral systems should have only one logic that conforms to their purposes - either 'sincere voting' under PR, which implies that the voters may freely express their first preferences, or 'strategic voting' under plurality/majority, which means that voters concentrate their ballots on the likely winners. The strategy of asking voters to make both sincere and strategic choices "is a sure manner to confuse their behavior, as well as a probable way of obtaining parliaments that cannot serve any purpose" (Sartori 1994: 75).

### 2.3 Earlier Classifications of Electoral Systems

Most of the existing classifications of electoral systems are primarily based on the electoral formula, only taking secondary account of the other components of electoral systems (see e.g. Blais and Massicotte 1996; Bogdanor 1983; Farrell 2001; Lakeman and Lambert 1954; Lijphart 1999). Classifications that give equal
attention to all three main dimensions of electoral systems have also been presented but they tend to be rather impractical in a methodological sense. Blais (1988: 99-110), for instance, proposes, in his own words, a more sophisticated classification than the existing ones. He distinguishes three components of the ballot structure (the object of the vote, the number of votes, and the type of vote), two components of the constituency structure (nature and magnitude), and three electoral formulas (majority, plurality and proportionality). This classification, he says, clarifies and refines existing distinctions, and takes superiority over earlier typologies. Although this may be a more appropriate typology in a theoretical sense, it is not very useful in empirical analyses of causes and effects.

Classifications of electoral formulas and systems are often based on their outcomes in terms of vote-seat relationship. Those systems that have 'proportional' outcomes are usually distinguished from those with 'non-proportional' outcomes. The essence of proportional electoral systems is that seats in the legislature should be allocated to the political parties in the same proportion, or as closely as possible, as support for those parties is divided among the electorate. In non-proportional systems, by contrast, greater importance is attached to strong and effective government by ensuring (or at least promoting) that the winning party receives a majority of seats. In addition, there are different degrees of proportionality and many authors also identify an in-between category of semi-proportional systems. However, Richard Katz points out that
"...this approach is both circular and self-contradictory - circular in that if the defining characteristic of an electoral formula is its actual degree of proportionality in the distribution of seats, then electoral formula cannot explain that distribution; self-contradictory in that... ...single-member systems are not uniformly less proportional than all semiproportional systems, which in turn are not uniformly less proportional than all systems using proportional representation" (1997: 109).

Notwithstanding, there is a widespread agreement that the principal difference is that between PR and non-PR systems, and that those systems that fit into none of these categories form an intermediate category. Lijphart, for instance, argues that these are the main types of electoral systems, each one containing a large number of subtypes. In a brilliant work, Electoral Systems and Party Systems: A Study of

Twenty-Seven Democracies, 1945-1990 (1994b), he classifies the plurality formula, two-ballot systems and AV as the main subtypes of majoritarian systems. Proportional systems are further divided into largest remainders, highest averages and STV. The category of semi-proportional systems consists of CV and LV. (1994b: 10). The same classification, including some additional subtypes, is applied in Patterns of Democracy (Lijphart 1999). The PR category is enlarged by the mixed member proportional formula, and the Japanese electoral system adopted in 1994 is called parallel plurality-PR (1999: 145).

In The International IDEA Handbook of Electoral System Design (1997), Reynolds and Reilly classify all existing electoral formulas and systems according to the same scheme as above, called 'electoral system families'. The plurality-majority family consists of first-past-the-post, BV, AV and the two-round formula. Parallel and SNTV are semi-proportional systems. The third family is called proportional representation and consists of list PR, STV and MMP.

In one of the first comparative analyses of electoral systems, Voting in Democracies written by Enid Lakeman and James Lambert (1954), four main electoral systems are identified: the first-past-the-post system, semi-proportional systems, proportional list systems and STV. ${ }^{10}$ The second ballot and AV are regarded as variations of the first-past-the-post system in addition to SMP, whereas LV (which includes SNTV) and CV are semi-proportional systems. Mixed systems, defined as single-member majority systems combined with allocation of seats on a proportional basis, are regarded a subtype of list systems.

In the introductory chapter of Democracy and Elections, edited by Bogdanor and David Butler (1983), the classification of electoral systems is based on the three main types of electoral formulas: plurality, majority and PR. Thereafter, outcomes in terms of proportionality are taken into consideration. The more proportional seat allocation by LV (which includes SNTV) in comparison with FPTP results in the creation of a fourth category of semi-proportional systems. Two forms of plurality systems are distinguished, FPTP and BV. AV and the second ballot represent majority systems, whereas list systems and STV belong to the PR category. List systems are, furthermore, classified according to the constituency structure

[^7](national, regional and local lists) and the object of the vote (closed, flexible, open and free lists), which ultimately results in twelve different kinds of list systems in addition to the other six electoral systems. Mixed systems are disregarded (Bogdanor 1983: 17).

In an eminent study, Electoral Systems: A Comparative Introduction (2001), Farrell distinguishes between plurality, majority and proportional electoral systems. In addition, a category of electoral systems that combine different electoral formulas is created (2001: 7-10). He maintains that the principal distinction with regard to political consequences is between proportional and nonproportional systems (2001: 192). A similar classification is applied in Handbook of Electoral System Choice (Colomer 2004) for the purpose of analyzing electoral system change. However, plurality and majority systems constitute one single category, and indirect elections represent a category of their own. In their analysis of the adoption of PR at the turn of the twentieth century, Blais, Agniezska Dobrzynska and Indridi Indridason (2005) distinguish between plurality, majority and proportional systems. Blais and Massicotte (1997) apply four categories plurality, majority, proportional and mixed systems - in their cross-sectional study of all countries with a working, directly elected legislature.

Perhaps the most detailed typology of electoral systems (for national elections), so far, has been presented by Blais and Massicotte in Comparative Democratic Elections, edited by Lawrence LeDuc, Richard G. Niemi and Norris (1996). They follow the classical approach and initially classify electoral systems according to electoral formula, while taking into account district magnitude and ballot structure. They identify three basic systems (plurality, majority and PR), a fourth category of mixed systems, and several subtypes of formulas. Four plurality systems are distinguished: plurality in single-member districts, plurality in multi-member districts, plurality in two-member districts with large minority representation, and plurality in both single- and multi-member districts. The majority systems are majority-plurality, majority-runoff, and alternative vote. The basic proportional systems are STV and list PR. List systems can be based on either a single national electoral district or local districts. Among systems with local districts, six variants are distinguished: (1) single tier; (2) two tiers, remainders pooled at higher tier; (3) two tiers, higher corrective; (4) two tiers, higher independent of lower; (5) three tiers; and (6) three tiers, higher corrective. Mixed systems are divided into four
subtypes: (1) plurality-PR corrective, (2) plurality-PR combination, (3) pluralityPR coexistence + combination, and (4) majority-PR combination + corrective (Blais and Massicotte 1996: 52-67).

In addition to constituency structure, PR countries are classified according to which allocation formula (LR-Hare, LR-Droop, d'Hondt or modified SainteLaguë) they apply, and information on whether they use closed lists, preferential voting or panachage is provided (1996: 57-60). ${ }^{11}$ Furthermore, the authors present a typology of threshold structure in proportional representation systems. Initially, PR systems with legal thresholds are distinguished from those without thresholds. Thereafter, two forms of threshold structure are identified: thresholds for getting a seat at a higher level in systems with several tiers, and thresholds for getting a local seat (1996: 62-63). Hence, the classification of PR systems takes four dimensions into consideration: constituency structure, electoral formula, legal threshold, and preferences for candidates. The authors maintain that due to the many different ways of combining these elements, no PR systems are exactly alike. They do not, however, distinguish between BV and LV (1996: 49-81).

### 2.4 A Typology of Electoral Systems

There is a great variety of electoral formulas and a classification of these into a few main categories is needed in order to conduct empirical analysis. Several previous classifications distinguish between plurality/majority, semi-proportional and proportional systems. Another common ground of classification is to divide formulas into plurality, majority, proportional and mixed electoral systems. Most classifications follow one of these two principles, sometimes with small modifications. If electoral formulas are classified according to degrees of proportionality, plurality and majority formulas are brought together into a single majoritarian category. Both the plurality and the majority rule usually produce much more disproportional results than proportional systems. Exceptions are LV (including SNTV) and CV, which tend to produce more proportional results than other plurality and majority formulas, but not as proportional as list PR and STV. Despite seat allocation according to the plurality rule, these formulas consequently belong to the intermediary category.

[^8]The degree of proportionality also varies between different types of mixed systems. If half the seats are allocated according to the majoritarian rule and the other half is proportionally distributed, the final vote-seat ratio should theoretically be somewhere between that of pure majoritarian and PR elections. However, if the PR tier is aimed at compensating for the disproportionality in the nominal tier, the mixed system becomes a proportional system in terms of effects. There are, furthermore, mixed systems that only partially correct the disproportionality caused by the majoritarian elections, which renders the classification of every mixed system according to the three-scale typology difficult. Another disadvantage of this classification is that it is by definition based on a particular feature of electoral systems, namely the degree of proportionality. Since the present study is not concerned with effects of electoral systems but rather with explaining the variety of electoral methods, a classification based on proportionality is not desirable.

Given the nature of the study, hence, the other common ground of classifying electoral systems appears more profound. As mentioned earlier, seats can principally be allocated in three different ways: by the plurality rule, by the majority rule, and proportionally among parties according to a specific quota or divisor. It seems appropriate to regard these as separate categories of electoral systems. Plurality and majority formulas certainly share some common features, especially in comparison with proportional systems, but the plurality and the majority rule have, notwithstanding, always been regarded as different electoral systems. Before the introduction of PR a century ago, these were actually the main alternatives of voting methods. All electoral systems that combine either the plurality or the majority rule with proportional allocation of seats constitute the fourth category of mixed electoral systems. This implies that e.g. the German system, despite producing proportional election results, does not belong to the proportional category. I regard the characteristic of combining two different electoral systems in one election as more fundamental than the feature of proportional seat distribution. Besides, the number of countries with MMP systems is very small. This is also true of countries that have adopted the semi-proportional SNTV during the second half of the twentieth century. In other words, the decision not to apply a category that exclusively identifies semi-proportional systems affects only a few cases.

Table 2.1. A typology of electoral systems: broad and detailed classification.

| Electoral systems | Electoral formulas |
| :---: | :---: |
| A. Plurality systems | 1. Single-member plurality (SMP) <br> 2. Block vote (BV) <br> 3. SMP - BV <br> 4. Limited vote (LV): Single non-transferable vote (SNTV) |
| B. Majority systems | 5. One-ballot majority (OBM) <br> 6. Two-ballot majority (TBM) <br> 7. Alternative vote (AV) |
| C. Proportional systems | 8. List PR <br> 9. Single transferable vote (STV) |
| D. Mixed systems | 10. Coexistence <br> 11. Superposition <br> 12. Fusion <br> 13. Conditional <br> 14. Corrective <br> 15. Super-mixed |

The typology of electoral systems in this study is presented in table 2.1. The broad classification distinguishes between plurality, majority, proportional and mixed systems, whereas the detailed classification consists of totally 15 sub-categories of these systems. Cumulative vote is left out of the typology, because no independent country has adopted this formula since 1945. The broad classification takes precedence over the detailed one. It would be of great value to provide explanations of the adoption of electoral formulas, i.e. to conduct empirical analysis on the basis of the detailed typology. For practical reasons, however, this is an impossible task. In order to conduct large-scale analyses, a generalization is inevitable. Consequently, the multivariate analyses are based on the broad classification. This holds true for a large part of the bivariate analyses as well. The detailed classification serves partly a descriptive and informative purpose. Given the explorative nature of the study, it is of general interest to map out the spread of electoral formulas around the world. Concerning some particular independent variables, it serves as a tool for constructing an appropriate categorization in analyzing bivariate associations. In bivariate analyses, the operationalization of the dependent variable differs from the broad typology in connection to the following
variables: ethnic and cultural diversity, party system transformation, colonial diffusion, and regional diffusion.

Two categories of electoral formulas and systems are applied when the relationship between ethnic and cultural diversity, on the one hand, and electoral system choice, on the other, is analyzed. One category consists of proportional systems and AV, whereas all other formulas belong to the other category. Concerning party system transformation, three categories are distinguished: majoritarian, mixed and proportional systems. The classification of electoral systems in the analysis of colonial diffusion depends on which electoral formula the colonial power used when each former colony proclaimed independence. As to regional diffusion, the detailed typology applies with a few exceptions. Explanations of deviating classification are given in section 3.3, where the operationalization of each independent variable is presented.

### 2.5 An Initial Survey of Electoral System Choice

The typology of electoral formulas and systems in table 2.1 constitutes the basis for the dependent variable of the present study, i.e. electoral system choice. By way of introduction, we need to define what is meant by electoral system choice. This study covers the time period from 1945 onwards, which implies that all existing electoral systems at the beginning of the year 1945 are excluded. Electoral system choice in this study is every electoral system that has been introduced between the first of January 1945 and the last of December 2003; i.e. every electoral system choice by a newly independent country irrespective of the way in which it has been adopted as well as every change of electoral system in countries that previously have had electoral laws as independent nations. However, the extent to which electoral systems are altered varies a lot. An electoral reform might involve a change from closed party lists in a proportional list system to preferential voting within party lists, or the introduction of an electoral threshold. These kinds of reforms do not change the electoral system as a whole, and are consequently not regarded as electoral system changes. In order to qualify as a case of electoral system change, the electoral formula by which seats are allocated must be replaced by another formula. There is, however, one exception to this rule. Several countries have switched back and forth between SMP and BV, sometimes by gradually increasing the number of multi-member districts at the expense of single-member
districts. These changes are regarded as minor reforms and do not qualify as cases of electoral system change. It may be pointed out that almost every change of formulas also involves a change from one basic system to another.

In this section, the frequency of adopted electoral formulas and systems around the world is presented. Separate information on electoral system choice in democracies is provided. In addition to all choices of electoral systems between 1945 and 2003, a survey of the electoral formulas and systems of the contemporary world, i.e. at the end of 2003 is shown. This is not relevant to the purpose of the study; it is rather presented on grounds of general interest.

Table 2.2. Electoral system choice 1945-2003. Detailed typology.

| Electoral formula | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| SMP | 50 | 18.7 |
| Block vote | 37 | 13.8 |
| SMP - BV | 12 | 4.5 |
| Limited vote: SNTV | 7 | 2.6 |
| One-ballot majority | 3 | 1.1 |
| Two-ballot majority | 34 | 12.7 |
| Alternative vote | 3 | 1.1 |
| List PR |  |  |
| STV | 19 | 25.7 |
|  | 1 | 0.4 |
| Mixed-coexistence | 7 |  |
| Mixed-superposition | 26 | 2.6 |
| Mixed-fusion | 2 | 9.7 |
| Mixed-conditional | 2 | 0.7 |
| Mixed-corrective | 9 | 0.7 |
| Super-mixed | 6 | 3.4 |
| Total N |  | 2.2 |

The frequencies of each formula adopted during the relevant time period are given in table 2.2. The total number of electoral system choice is 268. List PR is the most popular formula with 69 cases. The other proportional formula, STV, has been chosen only once (in Malta) between 1945 and 2003. The second most frequent formula is SMP of which 50 cases are identified, followed by BV with 37 cases. Of the majority formulas, TBM has been chosen 34 times, whereas only three
countries (Nauru, Fiji and Papua New Guinea) have adopted AV since 1945. OBM has been applied in North Korea since 1948 and in Cuba since 1992. This formula was also used in Burmese legislative elections from 1978 to 1985.

There are seven cases of SNTV. Vanuatu and the Maldives have applied SNTV since independence, Japan applied the formula until 1993, and Jordan introduced it the same year. Taiwan used SNTV from 1947 to 1989, and Bahrain and Congo (Kinshasa) have applied the formula in one election each. A mixture of SMP and BV has been adopted 12 times, e.g. in India 1950, Western Samoa 1963, Ivory Coast 1985, and Belau 1994.

Superposition is the most popular mixed system. Mixed-superposition has been adopted 27 times - all the other mixed systems are rather infrequent. Most of the superposition systems have been introduced in the 1990s, e.g. in Guinea, Croatia, Russia, Andorra and Thailand. Senegal and Egypt adopted this system in 1983 and 1986 respectively. The earliest example of superposition during the relevant time period is found in South Korea 1963. Seven choices of mixed-coexistence are observed: Guatemala 1946, Greece 1956, Suriname 1975, Zimbabwe 1980, Panama 1980, and Madagascar 1983 and again 1998. In their survey of mixed electoral systems, Massicotte and Blais (1999) did not find any national instances of the mixed-fusion system. However, in Paraguayan legislative elections from 1968 to 1989, the winning list was awarded two thirds of the seats, whereas one third was distributed proportionally among the other parties (León-Roesch 1993: 638). A similar system was applied in Nicaragua for legislative elections between 1962 and 1974 (Krennerich 1993: 583-584). These systems correspond to Massicotte and Blais' description of the mixed-fusion system (1999: 352-353). Mixed-conditional systems have been adopted only in France 1951 and Italy 1953. Mixed-corrective systems have been chosen eight times: in West Germany 1949, Mexico 1963, Albania 1992, Italy 1993, Venezuela 1993, Tunisia 1993, New Zealand 1996, and Bolivia 1997. Super-mixed systems have been introduced in six countries: Madagascar 1960, Ecuador 1978, Hungary 1989, Cameroon 1992, Chad 1996, and Monaco 2002.

In table 2.3, electoral formulas are merged into electoral system families. Plurality systems have been most frequently adopted since 1945 - they represent approximately 40 per cent of the population. Majority systems constitute the
smallest category, representing 15 per cent of all cases. Considering that mixed systems have, at least until the 1990s, been given quite little attention, they are far from rare: almost 20 per cent of all adopted electoral systems are combinations of majoritarian and proportional elections. Roughly one fourth of all cases are proportional systems.

Table 2.3. Electoral system choice 1945-2003. Broad typology.

| Electoral system | $\mathbf{N}$ | $\mathbf{\%}$ |
| :--- | ---: | ---: |
| Plurality | 106 | 39.6 |
| Majority | 40 | 14.9 |
| Proportional | 70 | 26.1 |
| Mixed | 52 | 19.4 |
|  | 268 |  |
| Total N | 200 |  |

All electoral formulas as of today are presented in table 2.4. Accordingly, this table includes electoral formulas adopted before 1945 as well. First of all, 16 of all 193 independent states at the end of 2003 lacked electoral provisions and/or a functioning directly elected national legislative body. Saudi Arabia, Oman, Qatar, the United Arab Emirates, Eritrea, and the Vatican City have never held parliamentary elections. The Chinese and the Bhutanese governments have never allowed their citizens to directly choose their representatives, and the only legislative elections in Brunei were held, indirectly, in 1962 and 1965, i.e. two decades before independence. The first legislature of Serbia and Montenegro was also indirectly elected in 2003 by the two state parliaments. The last elections in Libya, up to now, were held in 1965. In Afghanistan, Burma, Congo (-Kinshasa), Iraq and Somalia, electoral institutions were lacking at the end of 2003 because of political chaos, foreign occupation or military rule.

Table 2.4 shows that list PR is the most frequently used electoral formula today. 37 countries apply SMP, which is the second most common formula, compared to 66 PR countries. STV is applied in two countries only, Ireland and Malta. BV is not very popular anymore; only five countries (Kuwait, Laos, Lebanon, Mauritius and Syria) apply this formula today. The two-ballot majority formula, which is often referred to as the French system, is used in 16 other countries as well. SNTV is practiced in Vanuatu, Jordan and the Maldives. Among the mixed systems,
superposition is still by far the most popular formula, being applied in 20 countries. Mixed-fusion and mixed-conditional are not applied anywhere. Proportional and plurality systems are, with reference to table 2.5 , considerably more popular today than majority and mixed systems.

Table 2.4. Electoral formulas in the contemporary world 2003.

| Electoral formula | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| SMP | 37 | 20.9 |
| Block vote | 5 | 2.8 |
| SMP - BV | 8 | 4.5 |
| Limited vote: SNTV | 3 | 1.7 |
| One-ballot majority | 2 |  |
| Two-ballot majority | 17 | 1.1 |
| Alternative vote | 4 | 9.6 |
| List PR | 26 |  |
| STV | 2 | 37.3 |
|  |  | 1.1 |
| Mixed-coexistence | 2 |  |
| Mixed-superposition | 0 | 1.1 |
| Mixed-fusion | 0 | 11.3 |
| Mixed-conditional | 6 | 0 |
| Mixed-corrective | 5 | 0 |
| Super-mixed |  | 3.4 |
| Total N | 2.8 |  |

Table 2.5. Electoral systems in the contemporary world 2003.

| Electoral system | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| Plurality | 53 | 29.9 |
| Majority | 23 | 13.0 |
| Proportional | 68 | 38.4 |
| Mixed | 33 | 18.6 |
|  |  |  |
| Total N | 177 | 100 |

In table 2.6 and 2.7, all choices of electoral formulas and systems from 1945 to 2003 in democracies are given. There are only 63 cases of electoral system choice in democratic countries. It should be observed that countries that have had experience of democratic elections before independence have also been regarded as
democracies. ${ }^{12}$ Nevertheless, the great majority ( 76 per cent) of all electoral system choices has occurred in non-democratic circumstances. SMP and list PR are also the most popular formulas among democracies, their totals being 18 and 15 respectively. The dispersion of other formulas is more even in this sample. The share of BV, mixed-superposition and TBM is considerably smaller among democracies than in the total population.

Table 2.6. Electoral system choice in democracies 1945-2003. Detailed typology.

| Electoral formula | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| SMP | 18 | 28.6 |
| Block vote | 5 | 7.9 |
| SMP - BV | 3 | 4.8 |
| Limited vote: SNTV | 1 | 1.6 |
| One-ballot majority | 0 | 0 |
| Two-ballot majority | 3 | 4.8 |
| Alternative vote | 2 | 3.2 |
| List PR | 15 | 23.8 |
| STV | 1 | 1.6 |
|  |  |  |
| Mixed-coexistence | 3 | 4.8 |
| Mixed-superposition | 4 | 6.3 |
| Mixed-fusion | 2 | 0 |
| Mixed-conditional | 5 | 3.2 |
| Mixed-corrective | 1 | 7.9 |
| Super-mixed | 63 | 1.6 |
| Total N |  | 100 |

Table 2.7. Electoral system choice in democracies 1945-2003. Broad typology.

| Electoral system | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| Plurality | 27 | 42.9 |
| Majority | 5 | 7.9 |
| Proportional | 16 | 25.4 |
| Mixed | 15 | 23.8 |
|  |  |  |
| Total N | 63 | 100 |

[^9]More than 40 per cent of all electoral system choices under democratic circumstances are plurality systems, whereas the majority systems represent only 8 per cent of the democratic sample. Surprisingly enough, mixed systems are almost as frequent as proportional systems among democracies.

Table 2.8. Electoral formulas in the contemporary world 2003. Democracies.

| Electoral formula | $\mathbf{N}$ | \% |
| :--- | ---: | ---: |
| SMP | 19 | 18.8 |
| Block vote | 1 | 1.0 |
| SMP-BV | 4 | 4.0 |
| Limited vote: SNTV | 1 | 1.0 |
| One-ballot majority | 0 |  |
| Two-ballot majority | 3 | 0 |
| Alternative vote | 3 | 3.0 |
| List PR | 48 | 3.0 |
| STV | 2 | 47.5 |
|  | 2 | 2.0 |
| Mixed-coexistence | 10 | 2.0 |
| Mixed-superposition | 0 | 9.9 |
| Mixed-fusion | 0 | 0 |
| Mixed-conditional | 5 | 0 |
| Mixed-corrective | 3 | 5.0 |
| Super-mixed |  | 3.0 |
| Total N | 101 | 100 |

The spread of electoral formulas and systems among democracies in the contemporary world 2003 is presented in table 2.8 and 2.9. All countries that have scored 3 or lower in the Freedom House ratings every year since the last legislative elections are included. Today, list PR systems constitute almost half of all electoral systems in democratic countries. Only one fifth of the democratic world uses SMP. Mixed-superposition, which is the third most applied system, is applied in approximately one tenth of all democracies.

The most striking difference in comparison with all countries in the contemporary world is that TBM constitutes merely 3 per cent of all electoral systems, i.e. only three democracies - France, Mali and Kiribati - apply this formula, which after all is regarded as one of the main electoral formulas. BV (Mauritius) and SNTV
(Vanuatu) are represented by merely one country each. Concerning the broad typology, the proportion of plurality and majority systems is a bit smaller among democracies than among all countries, mostly at the expense of proportional systems.

Table 2.9. Electoral systems in the contemporary world 2003. Democracies.

| Electoral system | $\mathbf{N}$ | $\mathbf{\%}$ |
| :--- | ---: | ---: |
| Plurality | 25 | 24.8 |
| Majority | 6 | 5.9 |
| Proportional | 50 | 49.5 |
| Mixed | 20 | 19.8 |
|  |  |  |
| Total N | 101 | 100 |

The frequency of electoral system choice by each year from 1945 to 2003 is illustrated in figure 2.1. During the first year, only two electoral systems were adopted: Brazil and France introduced pure list PR for the first time. Eight electoral systems were adopted in 1946. Thereafter, the frequency of electoral system choice remained rather low until 1960 when 16 systems were adopted, mostly due to the fact that many African countries achieved independence that year.


Figure 2.1. Frequencies of electoral system choice 1945-2003.

Electoral systems were adopted quite frequently during the 1960s. In 1969, however, no electoral system was introduced. The frequency of adopted systems was quite low during the 1970s until a new peak was reached in 1978 with nine choices. Few choices of electoral systems were implemented between 1981 and 1989. However, the changes in the Communist world resulted in several new cases in the 1990s, 1993 being the culmination with 21 cases of electoral system choice.


Figure 2.2. Frequencies of electoral system choice in democracies 1945-2003.
The temporal spread of electoral system choice under democratic circumstances is given in figure 2.2. A similar pattern as in the previous figure is discernable but the pattern is not as clear as in the total population. Between 1945 and 1956, only ten electoral systems were adopted in democratic countries. Thereafter, electoral system choice became a bit more popular: twelve cases emerged from 1958 to 1966. Between 1967 and 1973, only Nauru and Fiji adopted electoral systems. A frequent period of electoral system choice began in 1974; seven years later 16 additional choices had taken place. Only three democratic cases are documented between 1982 and 1990, two of which occurred in France. A revival of electoral system choice among democracies has occurred since 1991-20 cases are observed between 1991 and 2003.

## 3. THEORETICAL FRAMEWORK

In this chapter, the theoretical framework of the dissertation is elaborated. The chapter consists of three parts. The first part deals generally with the choice of electoral systems. It contains a presentation of the debate on electoral systems, benefits and drawbacks of the main options, as well as criteria for evaluating different systems. The question of whether there is a best system is also dealt with. Since a large part of the data sample is cases of electoral system change, the matter of electoral reform is generally examined as well.

The literature on electoral system choice is examined in the second part of the chapter. Theoretical explanations are presented according to three competing as well as overlapping frames of reference: a rational perspective, a cultural and historical perspective, and an institutional perspective. The first mentioned is further divided into structurally generated problems and actor-related problems, because an electoral system choice may be rational with respect to both the context and the individual preferences of decision-makers. This study is certainly concerned with contextual determinants but the role of political actors in the process of electoral system choice cannot be completely ignored. Moreover, the relevance of party systems in explaining the adoption of electoral systems is foremost an actor-related matter but it comprises a structural dimension as well. Section 3.2 begins with a presentation of some previous studies, followed by a description of the frame of reference.

In the third part of the theoretical framework, the independent variables of the study are presented and operationalized. All variables are derived from the exposition of the literature on electoral system choice in the previous part. The following independent variables are included: (1) ethnic and cultural diversity, (2) population size, (3) party system structure, (4) party system transformation, (5) colonial diffusion, (6) regional diffusion, (7) temporal diffusion, (8) form of government, (9) territorial organization, and (10) chamber structure.

### 3.1 Choosing an Electoral System

### 3.1.1 Trade-Off Between Competing Values

As an introduction to explanations of electoral system choice, section 3.1 deals generally with the matter of choosing among different electoral systems and changing electoral rules. Basically, the main electoral system options are proportional and majoritarian systems. Electoral systems have, of course, several other basic features but this dividing line can with good reason be considered the most fundamental. A proportional system produces a representative legislature in terms of vote-seat ratios, whereas a majoritarian system over-represents the largest parties. This is the major distinction, which, in turn, has several other consequences. The quality of democracy and prospects for good governance are affected by several criteria, which plurality/majority and PR systems fulfil to varying extent. Reynolds and Timothy Sisk (1998: 21-23) argue that in choosing an electoral system, trade-offs must be made among the following competing normative ends: (1) representativeness, (2) accountability, (3) inclusiveness and accessability, (4) governmental stability, (5) development of the party system, and (6) ability to engender reconciliation.

First, the legislative assembly has to rather fairly reflect the opinions of the electorate as well as the composition of society along ethnic, regional and other lines. Second, the legislators must be accountable to their voters in terms of geographical representativeness; thus, providing interaction between the elected representative and the local electorate. The degree of accountability also depends on the range of choice between candidates and parties that the electoral system provides. Third, the electoral system must be inclusive in the sense that voters feel that their vote makes a difference; hence, providing accessibility to the political process. Inclusiveness also implies the representation of minority groups. Fourth, the electoral system needs to produce effective government and viable parliamentary opposition. Sensibility to shifts in public opinion is required for the alternation of power. Fifth, the electoral system must provide incentives for the development of parties based on ideological-political values and specific policy programs rather than ascriptive cleavages. This is particularly important in culturally heterogeneous societies. Finally, institutions that promote mutual
recognition of opposing views in the political system and counteract confrontational politics are required particularly in fledging democracies.

Patrick Dunleavy and Helen Margetts (1995: 13-17) present two different sets of criteria for evaluating electoral systems, focusing on whether there is a 'perfect' system that meets all requirements: criteria from democratic theory and state management criteria. The first set includes political equality (i.e. proportionality, no malapportionment, and no 'wasted' votes), representation of viewpoints (i.e. minority representation and social diversity), accountability (i.e. constituency representativeness), and importance of elections (i.e. clear government alternatives, distinct options on issues and policy directions, and a full range of choices). State management criteria are governability (i.e. government durability, avoidance of 'adversary politics', ability to enact a legislative program, and large-majority or consensus policy-making), party system stability (i.e. protection against antisystem parties and centrifugal tendencies), and handling social conflicts (i.e. dampening ethnic conflicts and consensus-building around political institutions).

It is obvious that no electoral system can fulfil all these values. Some values are maximized by proportional systems, whereas a majoritarian or a mixed system emphasizes other values. In addition, maximization of certain values occurs at the expense of other values. To choose the most appropriate electoral system for a country at a particular point in time is a matter of choosing among certain values. To put it shortly, majoritarian systems, plurality ones in particular, prioritize government effectiveness and accountability, whereas proportional systems promote greater fairness to minority parties and more diversity in social representation. Advocates of mixed electoral systems argue that a mixture combines, at least to some extent, the best of both worlds. Duverger writes that
"The choice of an electoral system is ... governed by concrete factors. It depends, above all else, on the function that the elected representatives must exercise. In order to form a consultative assembly which expresses all of a country's nuances, $P R$ is clearly preferable. In order to form stable and strong governments, capable of making decisions throughout the legislature's term, plurality is the best method" (1984: 36).

### 3.1.2 Is There a Best System?

The search for an electoral system that can be regarded as better than all other systems faces several difficulties. As we have seen, there is no ideal system. Even if we search for the best system in given circumstances, some controversy still remains. By which criteria should an electoral system be assessed? Which value takes precedence over all other values mentioned above? Many authors emphasize that there is no single 'best' system. Some are certainly advocates of particular systems - especially STV has earned great admiration among political scientists but because the arguments for and against different systems represent unsolvable value conflicts, no electoral system can universally be considered better than every other system.

The question of which system is the most preferable is ultimately a matter of normative judgement, as stated by Iain McLean: "The PR school looks at the composition of a parliament; majoritarians look at its decisions" (1991: 175). Therefore, it is not possible to draw firm, objective conclusions as to which is better, a proportional or a non-proportional system. Neither can we definitely decide which particular formula is best, since all formulas emphasize either the proportional or the majoritarian principle. According to Katz, there is no universally correct, most democratic electoral system, and no 'one size fits all' package. The most appropriate system for each country depends on three mutually contingent considerations, summarized by the author as "who you are, where you are, and where you want to go" (1997: 308).

Farrell (2001: 207) points out that history, social composition, and political structures determine which is the best electoral system for a given country. The most appropriate system for one country might be disastrous for another country due to completely different sociopolitical circumstances. Nevertheless, by means of expert advice and open debate, every country should be able to choose the most appropriate system for its particular conditions.

A great deal of the academic discussion on the advantages and disadvantages of electoral systems has been concerned with the question of which electoral system should be chosen in each given context. It emphasizes the political outcomes of electoral system design as the principal criteria for choosing between different
systems. If we reformulate the question above and ask which system in likely to be chosen, we recognize that electoral systems are chosen in the context of existing institutional arrangements. The institutional framework shapes the preferences of political actors as to which electoral system is to be chosen, and constrains their negotiating strategies over alternative rule configurations (Mozaffar 1998: 95-96).

The range of alternatives has also been restricted by the (lack of) knowledge of the constitutional drafters. Too often, Reilly and Reynolds argue, they choose the bestknown electoral system rather than thoroughly investigate the most appropriate options (1999: 57). The range of alternatives is to a great extent restricted by cultural, geographical and colonial factors. Electoral system choices are, according to the academic literature, often a result of imitation, either in terms of colonial legacy or regional influence. Some electoral systems have, thus, never been realistic options. These matters are thoroughly dealt with in section 3.2.4.

### 3.1.3 Reforming the Electoral System

In the introduction, I wrote that the electoral system is easier to change than other political institutions. However, Taagepera and Shugart (1989b: 2) point out that the ease of such a reform must not be overestimated. According to the academic literature, electoral system change has been quite rare in the democratic world. Two decades ago, Nohlen (1984: 218) maintained that electoral reform occurs in extraordinary historical situations only. In the same volume, Lijphart and Bernard Grofman (1984b: 11-12) addresses the following question: how likely is electoral reform? In a short survey, they conclude that there have certainly been several major changes in electoral systems since the beginning of the 1970s, e.g. in Northern Ireland, Japan and the United States, but these changes do not include any cases of national lower-house elections. As a consequence, their answer to the question is: "Changes and choices in electoral systems may not be highly probable, but they are certainly possible" (1984b: 12).

In Lijphart's (1994b) study of 27 established democracies between 1945 and 1990, only France had conducted fundamental electoral changes. In an even more comprehensive analysis by Stefano Bartolini and Mair (1990: 154-155), only 14 unbroken transitions in Europe from 1885 to 1985 - meaning a major shift in electoral rules between two democratic elections, excluding disruptions caused by
dictatorship, wars, the establishment of a new state, or the reappearance of an old one - were observed.

Many other scholars have described electoral institutions as 'sticky' in the sense that they are difficult to change (e.g. Birch et al 2002: 1; Geddes 1996: 31). Several reasons for this stickiness have been given. One apparent reason why major changes are unlikely is that those who are able to reform the electoral system are those who have been successful under the current system. The major parties have developed party organizations and strategies appropriate to that system. Clearly then, if reforms are to occur, political actors must rise above their self-interest and change the rules of a game that they are winning.

Dunleavy and Margetts (1995: 17-24) demonstrate why electoral systems are hard to change with reference to the United Kingdom. Once established, the constitutional framework develops entrenched interests from incumbent parties that benefit from the status quo. Introduction of a new electoral system creates uncertainty for parties about their prospects for success, and involves huge risks for incumbent representatives in securing re-election. Guy Lardeyret (1991: 34) points out that a change from a proportional to a majoritarian or a mixed system is particularly difficult, since it would require that small and middle-size parties cooperate in their own liquidation. There are nearly always enough threatened parties to prevent such a change.

Even in times of transition, past institutions tend to resurface. When political parties are outlawed by an authoritarian regime, they go underground and continue functioning, albeit in much reduced fashion. A loose organization is maintained, and when the present regime allows the reemergence of parties, the old party system is revived. These parties still represent the same societal groups, and they benefit from the same features of the institutional environment as before; hence, any institutional changes would be too risky for the established parties. This is why PR has survived in all Latin American countries that have experienced military regimes during the postwar era (Geddes 1996: 30-31).

Reeve and Ware (1991: 10-16) present six main reasons for the persistence of existing electoral systems. First, the implications of electoral rules are not always completely understood by politicians. As to the strategic consequences of changing
the rules, the lack of knowledge is even greater. Second, legal regulations imply restrictions to electoral system change. A simple majority of the present legislators can normally prevent such a change. Third, those that benefit most of the existing rules are usually those already in office. Since the present system is beneficial, they are most likely not interested in changing the rules. Fourth, the adoption of a new system always involves some degree of uncertainty. An electoral system change may ultimately work to the disadvantage of those who initiated them. Fifth, a reform may increase opposition among potential supporters who would be alienated by such measures. Sixth, a shift of electoral rules so as to favor the reformers themselves might raise the level of conflict. A fear of provoking a backlash may prevent those who want a change from initiating reform. Nevertheless, the authors emphasize that despite the stability in electoral rules that these factors together create, electoral system change must not be thought of as unthinkable.

Conventional wisdom among political scientists has stressed that electoral institutions reflect deep-rooted aspects of society and political life across democracies; therefore, countries change their electoral rules very rarely, if at all. Electoral systems reflect the politics of the time of their creation and are only altered when radical political change occurs - a change that makes the existing electoral system too restrictive (Taagepera and Shugart 1989b: 234). A longestablished electoral system most often serves its purpose of supplying a stable institutional framework for the expression of different viewpoints. Those political forces that are disfavored by the existing system learn to live with it by adopting strategies that minimize their drawbacks. Even if better suited according to the sociopolitical conditions, a new and unfamiliar system might be more disadvantageous for the political system (1989b: 218). Rein Taagepera and Shugart claim that "most of the longstanding electoral systems do the job" (1989b: 236). However, major reforms in several established democracies during the last 15 years have challenged the notion that electoral systems are stable. Established democracies such as New Zealand, Japan and Italy changed their electoral systems in the middle of the 1990s. New democracies in Eastern Europe, many of them fragile, have likewise conducted fundamental electoral reforms.

Introduction of a new electoral system always involves some uncertainty and a temporary reduction in stability. Taagepera and Shugart (1989a: 49) point out that
a change of electoral rules is most often not the cure for instability and lack of representativeness; the root of the problem is usually elsewhere. Major electoral reforms should be conducted carefully. Furthermore, electoral reforms should aim at simplicity, unless complications yield a much better outcome. A change of electoral rules may be desirable, according to the authors, if the existing system is confusingly complex (1989a: 51-53). Nevertheless, the major part of electoral reforms in the contemporary world occurs in the direction of greater complexity instead of simplicity.

### 3.2 Explanations of Electoral System Choice

### 3.2.1 Earlier Empirical Findings

The purpose of this section is to present some studies on determinants of electoral system choice, and to discuss some dubious explanatory factors put forward in the literature. There is no generally accepted theory of how countries adopt electoral systems. Some explanatory models and several possible determinants have, nonetheless, been presented. Reilly and Reynolds (1999: 23-27) assert that there are four basic ways in which electoral systems are introduced: via colonial heritage, through conscious design, by external imposition, and by accident. In their study of electoral system design in post-Communist Europe, S. Birch, F. Millard, M. Popescu and K. Williams (2002) present four different approaches to explaining electoral system choice: historical factors, foreign influences, contextual factors, and interest-based calculations. The object of their study is one specific type of electoral system choice, namely electoral reform, and their frame of reference is, consequently, determined by these circumstances. Notwithstanding, their theoretical framework bears relevance to the study of electoral system choice in general as well.

Surprisingly enough, only one comprehensive macro-comparative study of electoral system choice has been carried out so far. In an article titled 'Electoral Formulas: A Macroscopic Perspective', published in European Journal of Political Research, Blais and Massicotte (1997) examine which formulas are the most widespread, and whether the prevalence of a formula correlates with geographical, historical, economic, and political factors. Their data set consists of the legislative electoral formulas in force in 166 independent countries, whether democratic or
not. Consequently, their analysis covers all the sovereign countries of the world that had a functioning, directly elected parliament, as of December 1995. This strategy enables an analysis of whether democratic countries tend to adopt electoral systems that are different from those employed in less democratic ones. Freedom House's ratings of political rights are used for determining the level of democracy. In addition, the authors distinguish between old and new democracies. The criterion for being considered a democracy is to score 1 or 2 on ratings of political rights in 1994. In order to be regarded an old democracy, a country had to meet this criterion ten years in a row, i.e. as of 1985. These dummy variables are constructed in order to detect any clear patterns among the most recent democracies.

In addition to the level of democracy, the following independent variables are chosen: continent, size, the level of economic development, and colonial legacy. As for continent, the purpose is to examine whether culture and history are important determinants of electoral system choice. Five dummy variables are constructed - North America, South America, Africa, Asia and Oceania - Europe being the point of reference. Both territory and population are indicators of size. Concerning economic conditions, no direct link between economic development and the choice of an electoral formula is expected. Among the colonial powers, only Britain and France are selected, because, first, these countries possessed considerably more colonies than other colonizers, and, second, both Britain and France established representative institutions in their colonies prior to independence.

Concerning the dependent variable, Blais and Massicotte distinguish between plurality, majority, PR and mixed electoral systems. Plurality and PR systems are approximately equally popular; 70 per cent of all countries use one of the two. Majority and mixed systems are both applied in 25 countries. A slightly different pattern emerges when only democratic countries are studied: PR is more frequently used than plurality systems, and mixed systems surpass majority ones. This picture is altered when the total population size is examined instead of the number of countries. Half of the total population covered by their study elects its representatives by the plurality rule, whereas only 22 per cent vote under PR. Plurality systems are also more common than PR among large democracies.

The analysis indicates that four sets of factors influence electoral system choice. British colonial background is the most important determinant: their data suggest that if there had been no British influence, only 36 instead of 59 countries would apply the plurality system. The influence of French colonial rule is, on the other hand, weak. The majority system, which France has applied most frequently, is not significantly more common than other systems among former French colonies. The difference between the two colonial powers is, according to the authors, that the United Kingdom has continuously used the SMP formula, whereas France has often changed its electoral system.

The continental variable is also of great importance. Three groups of continents are distinguished: first North America, Africa, Asia and Oceania, where plurality systems prevail; second Europe, where PR is most frequent; and third South America, where PR dominates completely. The degree of democracy is the third factor that seems to be associated with the choice of an electoral formula: a high level of democracy correlates with the use of PR. As an explanation, Blais and Massicotte (1997: 113) suggest that the idea of proportional seat allocation among parties often corresponds to the idea of equally weighed vote of all citizens. The last factor related to electoral arrangements is territory size: the larger the country, the more likely it is to have single-member districts. This finding suggests that in a country with a vast territory, single-member districts are needed in order to provide close contact between representatives and their constituents. As expected, no association is observed between the level of economic development and the dependent variable. Neither is there any difference between old and new democracies. These results are based on an analysis of all countries. Rather similar patterns emerge when only democratic countries are studied. The legacy of British colonial rule is not as prominent as in the total population but, nonetheless, of considerable importance. Former British colonies are still more likely to adopt single-member districts, but the use of plurality is not as frequent as among the whole population. All other significant associations remain (Blais and Massicotte 1997: 107-129).

Birch, Millard, Popescu and Williams (2002) also put forward economic conditions as a possible determinant of electoral system choice. Similar thoughts have been suggested by Ronald Rogowski (1987). In an article titled 'Trade and Democratic Institutions', he argues that there is a natural affinity between trade and
proportional electoral systems. He asserts that the more an economically advanced state relies on external trade, the more it will be inclined to adopt a proportional system with large districts (1987: 206). In addition, trade-dependent states are likely to introduce a parliamentary system rather than presidentialism. Insulation, autonomy and stability constitute intermediate variables in Rogowski's explanatory model. Advanced economies that are largely dependent on international trade are likely to experience strong pressures of democratic participation. Therefore, it is important to adopt democratic institutions that maximize the state's insulation, autonomy, and stability. These factors are, in turn, best promoted by PR. First, insulation from regional and sectoral pressure is most easily achieved with large districts. Second, autonomy is best achieved by strong parties, which are furthered by list PR. Third, stability is best promoted by PR, large districts, and a parliamentary system.

By empirically studying 24 OECD-countries, Rogowski concludes that tradedependent states tend to have both PR and large districts. However, he concedes that the association does not reflect dynamic and historical processes: PR was not adopted in European countries because of increased dependence on trade (1987: 220-221). Nevertheless, he asserts that in an age of increasing dependence on trade, states will be increasingly constrained to adopt institutions conducive to openness and to effective competition on world markets (1987: 223-225). In other words, trade-dependence is proposed as a fundamental factor for an increased dominance of PR in the future. With reference to the finding by Blais and Massicotte (1997) that the level of economic development does not affect the choice of electoral systems, I shall not include economical factors in my analysis. Moreover, they did not even expect any particular relationship between economic level and electoral system choice.

Some authors maintain that there is a link between the level of democracy and the choice of an electoral system. In Blais and Massicotte's study, for example, the level of democracy is one of five independent variables (1997). The hypothesis that PR is associated with a higher level of democracy than other systems is confirmed. They argue that less democratic countries are less concerned about the representation of minority groups, and therefore less willing to adopt PR systems. Proportional representation coincides with the idea of democracy in contrast to the winner-take-all feature of majoritarian systems. "The fact that more democratic
countries are more likely to use a PR system tells us a lot about the powerful symbolic appeal of the principle of proportional representation" (Blais and Massicotte 1997: 116).

However, the higher frequency of PR systems among democratic countries should not come as a surprise at all, since authoritarian one-party states do not need proportional representation. Among new democracies, the authors do not find any dominant electoral system. There are, hence, natural explanations of the discovered pattern. Most authoritarian states that conduct general elections apply majoritarian systems, thereby contributing to the positive correlation between democracy and PR. There are other reasons as well to reject the level of democracy as a possible determinant of electoral system choice. The direction of causality, for instance, constitutes a problem. In order to reach a certain level of democracy, general elections need to be held, which in turn requires electoral provisions. In other words, electoral system choice precedes the level of democracy. However, in cases of electoral system change, there is naturally a measurable level of democracy. We may indeed assume that countries at different levels of democracy opt for different electoral systems. Nevertheless, the presence/absence of universal suffrage and the right for/prohibition on opposition parties to contest elections represent primary conditions that may determine the choice of a particular system. If the level of democracy bears some relevance to the choice of electoral systems, differences should, in other words, be explained by these two factors. A century ago, extension of universal suffrage contributed to electoral reforms in favor of proportional arrangements, whereas introduction of competitive politics is expected to be a relevant factor during the latter half of the twentieth century. I am, thus, inclined to assert that the extension of political rights, of which introduction of universal suffrage and competitive politics are two cornerstones, captures the essence of the causality between democracy and electoral system choice.

Birch, Millard, Popescu and Williams (2002: 14) consider PR a more appropriate system than plurality or majority in a democratizing country. A democratizing country is, hence, likely to adopt PR rather than a plurality or a majority system. Open debate and a concern for women's representation are further reasons why democratic countries are likely to adopt inclusive electoral arrangements. "In establishing the constitutional basis for a new regime, it is often thought desirable to adopt a system that will provide the opportunity of representation to as many
groups as possible, to avoid attempts at undermining the fragile new constitutional settlement" (Birch 2002: 14). However, their argumentation actually reflects the viewpoint that democratization is a consequence rather than a determinant of electoral rules. Democratization is, according to their opinion, better furthered by PR than majoritarian systems.

The role of democracy in choosing electoral systems is better understood in a recent article written by Blais, Dobrzynska and Indridason (2005). The authors maintain that two factors were particularly important in influencing the adoption of PR at the turn of the twentieth century: the spread of democratic ideas and the presence of a majority system, in contrast to a plurality system. They argue that PR had come to be regarded the most 'democratic' electoral system during the analyzed period (1865-1938), and, as a consequence, suggest that the push for PR was stronger in an environment in which democratic norms were more widespread. However, the normative appeal of PR was not enough. Another crucial factor is whether the choice was between plurality and PR or majority and PR. There are several factors that make PR more attractive when the present system is a majority one. First, the incentives to vote strategically are smaller in a majority system, because it requires more complex information, e.g. about the identity of the third runner-up and how the voters of the unsuccessful candidates will split their votes between the front-runners. As a consequence, the number of parties tend to be higher in majority systems than in plurality systems, which in turn leads to a higher frequency of multi-party governments. The smaller coalition parties are likely to favor the adoption of PR, because they are electorally disadvantaged by the disproportional electoral system. The major parties are likely to resist these efforts to a lesser extent in a majority system than in a plurality system, since they already face the necessity of forming government coalitions. All these circumstances, by reinforcing one another, suggest that PR is more likely to be adopted in a prevailing majority system than in a prevailing plurality system (2005: 182-185).

The unit of analysis is each legislative term during which PR could have been introduced. Naturally, the previous electoral system must have been held under some other electoral system than PR , and furthermore under democratic circumstances. The sample consists of 18 countries and 183 legislative terms. With a brief reference to some previous attempts to explain electoral system choice, the authors also include socialist threat (the interactive term of the strength of
socialism and the effective number of non-socialist parties), the $\log$ of the population, and the $\log$ of the number of years since the earliest observation in their logit model. The findings are in line with the assumptions. Both substantive variables, a democratic environment and majority, have a statistically significant effect on the propensity of PR reform. Concerning majority, however, the results are significant only at the 0.1 level. The adoption of PR was also more plausible in smaller countries. The hypothesis that PR was more frequently adopted in countries where the right-wing parties faced a serious socialist threat is not confirmed (2005: 186-190). The variables of interest in the article are not included in my study, because Blais, Dobrzynska and Indridason focus exclusively on the adoption of PR, which in turn requires a different research design than a general study of electoral system choice.

### 3.2.2 A Frame of Reference

In a book on causes and effects of institutional choices, Lauri Karvonen (2003: 32) presents three different kinds of explanations: (1) a historical perspective, (2) dispersion and/or diffusion, and (3) a rational approach. First, the historical approach regards the existence of present institutions against the background of a nation's historical development. Some historical features are preserved while others are rejected. Contemporary political institutions are considered as a reflection of past institutional arrangements. The second approach regards institutional choices as a matter of dispersion and/or diffusion. Lijphart, for instance, points out that the adoption of political institutions has largely been determined by geographical, cultural and colonial factors. These factors are at the same time highly interrelated. Nearly located countries often share a similar culture. Colonial powers, albeit to a varying extent, have transferred their values, political tradition and culture to the colonies. Geographical location, culture and colonial legacy represent various forms of diffusion. Another similar cause has been voluntary imitation of successful democracies (Lijphart 1991a: 74-75). According to the rational approach, countries adopt institutions that correspond to the particular needs of their societies (Karvonen 2003: 32). An institution is not an end in itself - there is a specific purpose for its existence. Societies with different sociopolitical conditions have different needs, and they consequently adopt different political institutions. In other words, the specific structure of a society is
associated with certain features and problems, which the adopted institutions should meet and solve.

In an essay that aims at explaining why some countries resort to some basic types of constitutional amendment methods, whereas other countries apply other basic types, Dag Anckar and Karvonen (2004) present a theoretical frame of reference that slightly differs from that of Karvonen (2003). Again, three explanatory frameworks apply. The first perspective regards political institutions as problemsolvers, thereby constituting a rational point of departure. The second approach sees institutional features as reflections of the cultural and historical context of which they are part. This perspective embodies colonial legacy as well as other patterns of imitation. In addition, the timing of independence of countries is regarded as a possible determinant. Institutional choice may, in other words, be an epoch phenomenon, associated with certain periods and eras, in the same way as the spread of democracy is said to evolve in 'waves' (Huntington 1991). The third approach pays attention to the overall constitutional design, i.e. the influence of other political institutions on institutional choice. It maintains that institutions are dependent on each other; the choice of one device leads to the choice of another device.

The theoretical frame of reference in this dissertation follows the same structure as that of Anckar and Karvonen (2004). First, rational explanations are dealt with. Second, electoral system choice is studied from a cultural and historical perspective. Third, the influence of other political institutions is examined. This theoretical framework is preferred to that of Karvonen (2003), because it is broader and more appropriate for the purpose of explaining electoral system choice.

It should be observed that the explanatory variables are of varying dignity, largely because of varying distance between independent and dependent variables. The temporal diffusion variable for instance, which regards electoral system choice as an epoch phenomenon, will shed some light on which systems have been the most popular at various points in time. As an explanation of electoral system choice, however, trend is unquestionably inferior to e.g. colonial legacy, which provides a concrete explanation of the adoption of a particular electoral system. Variables that belong to the institutional perspective are likewise of less importance than e.g. those belonging to the rational perspective. Several institutional choices are often
made at the same time, put in concrete form by adopting a new constitution, thereby making the distance between the choice of electoral system and the choice of other institutions practically non-existent. In this context, however, the choice of a particular system is regarded as dependent on the presence or adoption of other specific political institutions. Thereby, electoral system choice constitutes the dependent variable, at least in a theoretical sense. Nevertheless, it is obvious that e.g. cultural diversity and size are of greater importance as explanatory variables than factors which are akin to the explained object.

Is the strategy of analyzing electoral system choice from three different perspectives justified? Why not regard choice on the basis of structural traits and societal needs as the rationale of electoral system choice, and accordingly concentrate on a single rational approach? Electoral system choice as a consequence of prevailing ethnic composition, country size and party system structure, on the one hand, and choices dependent on other political institutions, on the other, might both be regarded as rational solutions, even though there are differences between the two as evident from above. A single perspective that considers electoral system choice as dependent on prevailing structural conditions implies inevitably a narrower frame of reference than the chosen one. This is a rather unexplored topic, at least in its entirety, and in order to break new ground a broad design is needed. A survey of the basic literature on the origin of political institutions in general and electoral institutions in particular results in a framework consisting of rational, cultural and institutional forms of explanation. It should be repeated that this study is not concerned with rational choice analysis in a proper sense. The term rational implies, firstly, that an electoral system is regarded as an appropriate solution given some structural traits, and, secondly, that electoral systems are chosen by political actors, who prefer particular electoral arrangements.

### 3.2.3 The Rational Perspective

The rational approach to electoral system choice maintains that electoral systems serve certain purposes. It is largely concerned with deliberate design of electoral rules on the basis of the sociopolitical conditions of a society. According to this view, the structural differences between countries explain variations in electoral system design. First, we need to specify what is meant by electoral system design,
also called electoral engineering. More broadly, we may speak of institutional design or constitutional engineering. There is an important distinction between institutional choice and constitutional engineering. Political actors in a newly independent country may adopt certain institutions, because they expect them to maximize their gain in the short term. This is an institutional choice based on rational considerations as for the short-term consequences of institutional arrangements. By contrast, the discipline of constitutional engineering rests upon the assumption that long-term stability is the primary goal of a country, and that the most appropriate institutions in this respect may not be the same as those that the negotiating actors will benefit from. Institutional design is, hence, concerned with engineering political outcomes through the choice of institutional structures (Reilly and Reynolds 1999: 5; Reynolds 1999a: 12-13). Both strategies are, however, rationalistic in nature. This field was given contemporary prominence by Sartori (1968) who urged political scientists to take up the challenge of becoming participants in the shaping of political institutions via 'constitutional engineering'.

Deliberate electoral engineering occurred already in the nineteenth century and at the beginning of the last century. For instance the alternative vote in Australia was introduced (in 1918) for the purpose of solving the problems of conservative forces 'splitting' their vote opposed by a rising Labor Party (Reilly and Reynolds 1999: 24). The introduction of list $P R$ in continental Europe was also a result of conscious design with regard to the needs of ethnically diverse societies. In contrast, the decades of decolonization after World War II witnessed few cases of deliberate electoral engineering. Reilly and Reynolds (1999: 25) point out that large number of ethnically plural countries in Africa and Asia inherited the inappropriate SMP from Britain and TBM from France, thereby contributing to the second 'reverse wave' of democracy. However, a revival of electoral system design has taken place during the third wave of democratization. In most part of Eastern Europe, negotiations on the electoral system between the Communists and the new parties were conducted. Academic attention concerning electoral engineering as a means of mitigating conflict has been paid to several countries with deep ethnic, linguistic and religious cleavages (1999: 9).

A given electoral system may also be a disastrous solution for a country. As Jean Laponce and Bernard Saint-Jacques write, "institutions are problem-solvers and, unavoidably, they are also problem-creators" (1997: 233). Reilly and Reynolds
maintain that electoral system choices are often "made through a kaleidoscope of accidents and miscommunications leading to a multitude of unintended consequences" (1999: 26-27). They actually regard accidental adoption or evolution of electoral systems as one of four basic kinds of electoral system choice. However, this way of adopting electoral laws coincides to a great extent with that of colonial heritage. Most of the accidental electoral system choices with disastrous consequences have been inherited from former colonial powers. There are, nonetheless, other cases of accidentally adopted electoral rules as well. In 1993, Jordan rejected SMP-BV and introduced the more proportional SNTV on the personal initiative of King Hussein; thereby facilitating the election of a quite large share of Islamic fundamentalists to the legislature (Reynolds and Elklit 1997: 5354). However, not every accidental choice has led to tragic outcomes. The authors mention the Papua New Guinean heritage of the alternative vote from Australia as a positive example. A system that encourages vote trading between competing candidates and different communal groups was exceptionally appropriate for the ethnically fragmented democracy. ${ }^{13}$ Notwithstanding, the poor experience of many accidental choices, inherited or not, has emphasized the importance of designing electoral rules for the specific sociopolitical conditions in a society rather than automatically assuming that a design that works successfully in one context will work identically in different social, political and economic circumstances.

Birch, Millard, Popescu and Williams (2002: 14) also point out that the appropriateness of a given electoral system depends on the social and political context in which it operates. There is, however, no ideal electoral system for each country. With reference to Rokkan (1970), multi-ethnicity is mentioned as one contextual factor that demands PR in order to provide legislative representation for minority groups. Electoral system design may also be affected by economic considerations. The impact of economic conditions is, nonetheless, considered weaker than that of other contextual factors (Birch, Millard, Popescu and Williams 2002: 16). The political context is another determinant mentioned by the authors. Countries with strong opposition forces do not necessarily adopt the same type of electoral system as polities with asymmetric power relations that favor old elites. These circumstances are especially relevant to the post-Communist environment

[^10](2002: 14). Public opinion, often expressed through referendum, is also considered a force of potential relevance to electoral reform. The New Zealand and Italian reforms in the 1990s are presented as examples of public opinion determining electoral system choice. Finally, the authors point out that the relevance and nature of contextual factors varies according to the specific social, cultural, historical and economic situation that prevails (2002: 16).

The rational perspective contains two dimensions. An electoral system choice may be a rational solution with regard to the societal needs that emerge from structural traits. However, the adoption of an electoral system may also be a rational solution from the actors' point of view. Every politician in the negotiation process most likely prefers that electoral system which he or his party will benefit from; the adopted system thereby being a rational choice for the potential winners. The study is concerned with contextual determinants but the role of political actors cannot be totally disregarded. More specifically, the dissertation does not focus on actors but on the political context in which actors make their decisions on electoral arrangements. This matter becomes particularly apparent when the association between party systems and electoral system choice is discussed. Electoral system choice as a consequence of party system structure or party system transformation is foremost an actor-related matter but has a structural dimension as well. As for the rational perspective, I shall distinguish between structurally generated problems and actor-related problems.

There are some important differences between these two. Structural theories are basically deterministic in nature; they regard the occurrence of certain political phenomena as the consequence of certain structural traits. However, structural explanations do not comprise the dynamics of the political process. The actorrelated approach, on the other hand, is concerned with the process in which political actors implement decisions on the basis of the existing structural settings. Another important difference is concerned with the distance between the independent and the dependent variable. Structural theories usually meet the scientific criterion that the explanatory factor should precede the explained phenomena. Concerning actor-related explanations, however, the risk of explaining a phenomenon by the phenomenon itself is always present (Karvonen 1997: 7475). Both approaches are, nevertheless, important and may be seen as mutually
supporting each other. One deals with the structural prerequisites, whereas the other deals with the dynamic of the political process, given these prerequisites.

In the following, some explanations of electoral system choice within the rational perspective are more thoroughly dealt with. The initial adoption of proportional systems suggests two explanations of electoral system choice that belong to the rational approach: cultural diversity and the dynamic of the democratization process (Lijphart 1992a: 207). The former is a structural factor, whereas the latter is an actor-related problem. As an introduction to structural rationality, I shall generally deal with the introduction of PR in Western Europe, since the earliest examples of electoral system design occurred here. Electoral engineering in plural societies is thereafter closely investigated. Country size is the other structurally generated variable to be dealt with. The importance of party system structure and the dynamic of the democratization process are examined as actor-related problems.

### 3.2.3.1 Structurally Generated Problems

The adoption of list PR coincided with the extension of suffrage and the development of mass parties at the end of the nineteenth and the beginning of the twentieth century. Before the introduction of the d'Hondt formula for parliamentary elections in Belgium in 1899, all legislative elections had been held either under the plurality or the majority rule. The task of proportional representation among political groups with reference to the electorate was of secondary importance, if any. The right to vote was restricted: the will of a part of the citizens was taken to express the will of the whole.

The majoritarian electoral systems came under heavy attack as representative democracy developed. The extension of the suffrage facilitated the organization of strong lower-class parties but the electoral rules rendered the entry of such parties into national politics difficult. The majoritarian principle effectively kept small parties outside the legislature, or at least restricted their representation to a few seats. The earliest pressures towards electoral reform were felt in Belgium and Switzerland - both divided societies in terms of ethnic, linguistic and religious composition. So called 'Electoral reform societies' required an electoral system that would equalize the representation of the different communities involved.

Similar reform societies were established in other democracies as well. An international conference on electoral reform was held in Antwerp in 1885, at which the merits of different electoral systems were discussed. The conference, which was attended by delegates from several countries in continental Europe but none from the 'Proportional Representation Society' in England, came to a decision in favor of the d'Hondt system. The conference stated that the only means of assuring power to the real majority of the country is by proportional representation, and "that the system of elections by absolute majorities violates the liberty of the elector, provokes fraud and corruption, and can give a majority of seats to a minority of the electorate" (Carstairs 1980: 3).

The adoption of list PR in Belgium was followed by similar electoral reforms in Finland in 1906 and in Sweden in 1907. By the mid-1920s, most countries in continental Europe had switched to list PR. France and Iceland did not adopt pure PR systems until 1945 and 1959 respectively, whereas the collapse of the authoritarian regimes in Spain and Portugal in the 1970s paved the way for proportional systems at the Iberian Peninsula. Ireland chose another kind of proportional system - the single transferable vote, devised by an Englishman, Thomas Hare - in 1921. The United Kingdom, Monaco and Andorra are the only Western European countries that never adopted proportional representation for national elections.

Two phases of the introduction of proportional systems can be distinguished: the 'minority protection' phase before World War I, and the 'anti-socialist' phase immediately after the war. The first phase was concerned with the problem of ethnic and religious minorities. In divided societies, the majoritarian system could clearly threaten the stability of the political system. PR was consequently designed to facilitate minority representation; thereby counteracting potential threats to national unity and political stability. "It was no surprise", Rokkan argues, "that the earliest moves toward proportional representation $(P R)$ came in the ethnically most heterogeneous countries" (1970: 157). The 'anti-socialist' phase was concerned with the dynamic of the democratization process. Being an actor-related problem, this phase is dealt with in section 3.2.3.2.

### 3.2.3.1.1 Electoral System Design in Plural Countries

The possibility of achieving political stability and mitigating ethnic conflicts in plural societies through conscious electoral system design has been given much attention especially during the last decade. Sisk, for instance, notes that "there has been an implicit assumption by scholars of comparative politics who specialize in divided societies that... ...political conflict can be potentially ameliorated if only such societies would adopt certain types of democratic institutions" (1995: 5). ${ }^{14}$ Most experts on divided societies agree that deep ethnic and other societal cleavages cause serious problems for democratization and that the establishment and maintenance of democracy is more difficult in fragmented than in homogeneous societies (Lijphart 2002: 38). As early as in the nineteenth century, John Stuart Mill maintained that democracy is "next to impossible in a country made up of different nationalities" and completely impossible in countries, where the people "read and speak different languages" (1861: 230). Since then, a lot of divided societies have become democratic but the general thrust of the argument among experts has, nonetheless, remained the same. Most experts also agree that the problem of ethnic and other deep cleavages is greater in non-democratic countries and in fragile democracies than in well-established democracies.

The discipline of constitutional engineering recognizes that all societies are inherently conflictual to some degree, and that democracy is a means of managing and processing conflict, rather than abolishing it. Conflicts under democracy are never solved for good; they are rather temporarily accommodated and reformulated time after time (Reilly 2001: 5). The challenge for divided societies is, hence, to mitigate political conflict, provide incentives for cooperation, and introduce accommodative elements into the political game through constitutional engineering.

Therefore, the design of the electoral system is particularly important in divided societies. Institutional design certainly matters in homogeneous countries as well, but democratic stability in these countries is not dependent on electoral arrangements to the same extent as in societies with profound ethnic, religious and/or linguistic cleavages. In divided societies, the electoral system may

[^11]systematically favor or disfavor certain ethnic, religious and national groups. For instance, the plurality system is often held responsible for the political chaos and the lack of democracy in many plural African countries. When the major part of Africa was becoming independent, W. Arthur Lewis asserted that "the surest way to kill the idea of democracy in a plural society is to adopt the Anglo-American system of first-past-the-post" (1965: 71). Reynolds and Sisk write that several African wars during the post-colonial era have roots in the winner-take-all approach to politics. The continuing domination of one ethnic group or coalition of groups and exclusion of other groups from government has been the primary source of ethnic tensions and violence (1998: 29).

Democratic competition between political parties in divided societies is inherently difficult because of the strong tendency towards politicization of ethnic interests, which in turn tend to produce zero-sum, winner-take-all politics. Campaigning along ethnic lines rather than ideological lines provides often a more effective means of mobilizing voter support (Reilly 2001: 4). Donald L. Horowitz, one of the first who dealt with the problem of democratic competition in divided societies, points out that the tendency of establishing ethnic parties is cumulative, as other groups tend to follow. The tendency to organize parties along ethnic lines, he maintains, is particularly strong in those divided societies where a few major ethnic groups compete for political power (1985: 306). The most conflict prone party systems are those with only two ethnic parties (1985: 360). There is no reason for ethnic parties to defuse the ethnic conflict, because the more members of a party's ethnic base that vote the greater the electoral success for that party (1985: 332). Support of parties in ethnically based party systems is very ascriptive: "The parties act as the organizational expression of the ethnic groups they represent. As the groups advance mutually exclusive claims to power, so, too, do the parties. The ultimate issue in every elections is, starkly put, ethnic inclusion or exclusion" (1985: 348). The main features of the ethnic party system are, as a consequence, stable parties and unstable politics. ${ }^{15}$

There are several structural techniques to reduce ethnic conflict in divided societies. Federalism and regional autonomy are two institutional means of mitigating tensions in countries with deep ethnic cleavages (Horowitz 1985: 601-

[^12]628). Electoral system design is the third basic way of promoting ethnic accommodation. Horowitz presents five possible aims for an electoral system in a divided society (1985: 632). First, the electoral system should fragment the support of the majority group to prevent it from permanent domination. Second, the electoral system should promote moderate behavior of the majority ethnic group towards other groups and interethnic bargaining. Third, the electoral system should encourage the formation of multiethnic coalitions. Fourth, the electoral system should invoke incentives for multipolar balance among several groups to prevent permanent exclusion of certain minority groups. Fifth, disproportional electoral results in favor of the largest group should be avoided. Still, Horowitz points out that no electoral reform can work magic on ethnic conflict, but several constructive measures are, nevertheless, possible in deeply divided societies by means of appropriate electoral arrangements (1985: 650-651).

There are, however, different kinds of divided societies, which precludes 'one size fits all' conflict-management solutions for culturally heterogeneous countries as a whole. They can be fragmented into many contending groups (e.g. Papua New Guinea) or balanced between a few equally large groups, either in bipolar (Cyprus and Fiji) or multi-polar (Bosnia-Herzegovina) structures. They can also be characterized by a dominant majority (Sri Lanka) or a dominant minority (Rwanda). Ethnic groups can, furthermore, be territorially concentrated or widely dispersed. The most appropriate electoral arrangements for a given divided society depend, first, on the number of segments (i.e. ethnic groups) and, second, on the relative strength of different segments (Reilly 2001: 185).

Reilly and Reynolds (1999: 10) bring out three particularly salient variables when assessing the appropriateness of a given electoral system for a divided society: (1) the nature of societal division, (2) the nature of the political system, and (3) the process which led to the adoption of the electoral system. Four elements are relevant to the nature of societal divisions. The first one deals with the nature of group identity. A society can be divided along different kinds of divisions, e.g. racial, ethnic, religious, regional or linguistic. Several of these may also coincide with each other. Moreover, the nature of group identity varies according to how rigid and entrenched these divisions are. If ethnic loyalty is primordial, and therefore rigid, power sharing through an electoral system that accommodates
interests based on ascriptive communal traits instead of ideological ones is needed (1999: 10-11).

The nature of societal divisions is, secondly, determined by the intensity of conflict. The authors emphasize that most ethnic conflicts do not degenerate into civil war - most societies are capable of maintaining a sufficient degree of mutual accommodation in order to avoid state collapse. The third element of societal division is the nature of the dispute. A classic issue of dispute is that of group rights and status for a group of people who see themselves as a distinct cultural community with a common language, religion and/or physical characteristics. The fourth element of societal division that matters to electoral system design concerns the spatial distribution of ethnic groups, and particularly their relative size, number, and degree of geographic concentration or dispersion (Reilly and Reynolds 1999: 10-16).

The appropriateness of an electoral system for a divided society is also determined by other features of the political system. Reilly and Reynolds assert that electoral system design is more important in centralized and unicameral parliamentary systems than in federal systems and bicameral legislatures with a balance of power between the two houses. The latter elements provide alternative mechanisms for minority representation and inclusiveness. A directly elected president also decreases the vitality of inclusive electoral arrangements. The importance of electoral engineering is heightened when a unicameral legislature must produce an oversize executive cabinet in order to carry out effective decision-making (1999: 16-18).

The third set of factors that determines the appropriateness of an electoral system in divided societies concerns other determinants of electoral system choice that may pose limits on electoral engineering. Was the original system inherited from a colonial power or was it consciously designed? It might also have been externally imposed or a result of unintended consequences (1999: 10). All in all, these three variables, or set of variables, constitute Reilly and Reynolds' analytical framework upon which a contingent theory of electoral system design may be built. In addition to the ethnical structure itself, electoral system design in divided societies is affected by other features of the political system as well as other factors that shape electoral rules.

Four specific electoral systems are, according to Reilly and Reynolds (1999: 2728), suitable for divided societies. Each one of them is derived from a specific school of constitutional engineering. These are consociationalism (primarily based on list PR), centripetalism (principally based on AV), integrative consensualism (mainly based on STV), and explicitism (usually based on the block vote).

Consociationalism - a term invented by Althusius, and Lijphart's chief concern since the late 1960s - is one of the most discussed prescriptions for plural societies. G. Bingham Powell has evaluated the theory of consociational democracy as one of "the most influential contributions to comparative politics" (1979: 225). Consociational democracy consists of four basic elements. The first principle prescribes executive power-sharing among the representatives of all significant groups. Consociational democracy is, in this respect, the opposite of majoritarian democracy as prescribed by the Westminster model. Advocates of majority-rule usually assume that there will be alternation in government: today's minority becomes the majority in the next election. Moreover, they assume that the policy preferences of the majority and the minority are quite close to each other, and that the interests of the minority are reasonably well served by the government's policies. These assumptions do not, however, apply to divided societies: the chances of regular alternation in power are drastically reduced because of markedly diverge interests of different groups and much more rigid loyalties of voters to political parties. Therefore, power-sharing through grand coalitions that embody all significant segments of the society is needed.

The second principle - a high degree of internal autonomy for each of the segments - is a complement to the power-sharing principle: decisions on issues of common interests should be made jointly; on all other issues, each segment should be allowed to decide for itself. In contrast to the Westminster principle of majority rule, segmental autonomy recognizes geographical and functional areas that are minorities' exclusive concern.

Proportional representation is the third element of consociationalism. A proportional electoral system is needed in order to eliminate the sharp distinction between winners and losers evident under majoritarian democracy, which normally uses the plurality system. By means of proportional seat allocation, Lijphart
argues, both majorities and minorities can be 'winners' by electing a number of representatives that corresponds to their societal strength respectively. The concept of proportionality also includes fair distribution of public funds and appointments to the public service.

The fourth principle prescribes a minority veto on the most vital issues. Even in a power-sharing cabinet, the minority may be overruled or outvoted by the majority. A mutual minority veto that restricts the power of the majority to overrule the minority when constitutional or other vital issues are at stake constitutes the ultimate weapon that minorities need to protect their interests (Lijphart 1985: 6-9; see also Lijphart 1977).

The great value of consociationalism, according to Reilly and Reynolds, lies in its powerful conflict-solving capacity in divided societies that have no hope of generating interethnic political accommodation. "It is the solution when all else fails" (1999: 31). However, if a divided society shows potential for voting beyond ethnic lines, consociational democracy provides few incentives for accommodative political behavior (1999: 31-32). In these societies, the centripetalist approach provides more appropriate arrangements. Following Sisk (1995), centripetalism is understood as institutions and policies that encourage cooperation and centrist policies, while countering extremism and conflict behavior. "The explicit aim is to engineer a centripetal spin to the political system - to pull the parties towards moderate, compromising policies and to discover and reinforce the centre of a deeply divided political spectrum" (1995: 19). At the heart of centripetalism is the need to create incentives for accommodation between competing interests in societies with deep ethnic cleavages, and to process centripetal outcomes from divergent interests and preferences (Reilly 2001: 7-8).

The electoral system is regarded the chief agent of interethnic accommodation. In deeply divided societies, the thought of voting for a member of a rival group is usually very far-fetched. However, the alternative vote formula, which permits voters to declare not only their first choice, but also their second, third, and subsequent choices, has the ability of inducing interethnic bargaining and promoting accommodative behavior by means of 'vote-pooling' and 'preference swapping'. Since the first preferences received from voters of one's own ethnic group may not constitute a majority, politicians are encouraged to campaign for the
votes of members of rival groups. ${ }^{16}$ Thereby, political actors from different groups have an incentive to bargain and negotiate in the search for cross-partisan and cross-ethnic vote-pooling deals. In a situation where no candidate can be assured of an outright majority of support, those candidates who successfully 'pool' both their own first preferences and the second preferences of others will be elected. In order to attract the support of other groups, candidates are encouraged to, first, move to the center on policy issues, and, second, to focus on cross-cutting issues that unite rather than divide different ethnic groups. The more groups in a given district, the more likely it is that meaningful vote pooling will occur.

Integrative consensualism is a theory that builds upon both consociationalism and centripetalism. Its key features are the mandatory executive power-sharing of the former and the centripetal element of preferential voting - not under AV but the proportional STV. The goal is to encourage cross-cutting cleavages and party appeal beyond defined ethnic boundaries, while ensuring fair representation and inclusion of minorities in the decision-making process. There are, however, no concrete examples of the integrative model in the real world. The constitutional arrangements for self-government in Northern Ireland come closest to this typology (Reilly and Reynolds 1999: 36-40).

The fourth approach to conflict management in divided societies through electoral engineering is to explicitly recognize the importance of group identity in the political process. This is managed by establishing fixed ratios of different ethnic groups in the legislature. Four different solutions are at hand: the use of communal electoral rolls, the presence of reserved seats for cultural minorities, the use of ethnically mixed or mandated candidate lists, and the use of 'best loser' seats to balance ethnic legislative representation. A system of communal representation is the most straightforward approach to the school of constitutional engineering called explicitism. It usually implies that each 'community' has its own electoral roll and elects only legislators of its own group according to a fixed ratio. The entire system of representation is, hence, based on communal consideration. An evident drawback of this approach is that it undermines the path of accommodation between different groups as there are no incentives for political intermixing. This model has been formerly applied in e.g. Fiji and New Zealand (for Maori only).

[^13]A more popular form of recognizing communal groups in the electoral arrangements is to reserve some seats in the legislature for ethnic, linguistic, or other minorities. India (scheduled tribes and castes), Colombia ('black communities'), Croatia (several minorities), Samoa (nonindigenous minorities), and Niger (Tuareg), among others, make use of this device. Some regions might also be over-represented in order to facilitate an increased representation of minority groups. Affirmative gerrymandering also serves this purpose. Block vote with ethnically diverse lists is a third way of ensuring balanced ethnic representation. Voters usually choose between these various lists with a single vote. Since each list comprises candidates of different ethnic groups, the choice must be based on criteria other than ethnicity. The Singaporean electoral system is the foremost example of this device. However, block vote without balanced ethnic representation has been much more common than block vote with a built-in tool of conflict management. In Mauritius, a fourth kind of explicitism is applied. The highest polling candidates of under-represented ethnic groups are given four 'best loser' seats in order to balance ethnic representation (Reilly and Reynolds 1999: 40-43).

Consociationalism and centripetalism are the most important of these four doctrines. The main difference between the two is that the former replicates existing ethnic divisions in the legislature, whereas the latter tries to break down the salience of ethnicity by encouraging cooperation and accommodation between rival groups before elections. Preferential systems have the capacity of transcending the political salience of ethnicity by promoting accommodation and bargaining across group lines (Horowitz 1991; Reilly 2001: 21). The appropriateness of these models depends to a large extent on the number of segments in a society. According to Lijphart, the optimal number of segments for a consociationalist approach to work properly is three or four; conditions become more difficult when more segments are added (1977: 56). The dynamics of the centripetal model are reversed; the prospects for successful vote-pooling increase as the number of groups increases. Three ethnic parties or groups constitute a minimum number necessary for vote-pooling to work (Reilly 2001: 186). Australia, for instance, has one of the world's most diverse populations in cultural terms. Notwithstanding, relatively high levels of inter-communal harmony and integration have characterized Australian ethnic relations. The institutions and
policies in Australia, Reilly writes, "represent one of the best approximations of a complete package of centripetal political institutions amongst comparable democracies" (2001: 43).

AV and STV should, according to Reilly (2001: 147), be regarded as variations on the same basic theme. It is primarily a matter of district size. The smaller the number of representatives per district, the more STV resembles AV. The appropriateness of each system is mediated by the social structure in which it is used. Horowitz prefers the AV and SV forms of preferential voting to STV, because the latter produces weaker incentives for cross-ethnic accommodation. He maintains that 'vote-pooling', in which parties are encouraged to appeal for voters across ethnic lines, "lies at the heart of inter group compromise in severely divided societies" (1991: 167). Incentives for 'vote-pooling' are most effectively provided for by the AV system. Before the drafting of the 1994 South African constitution, Horowitz proposed the use of AV in multi-member districts. In the volume $A$ Democratic South Africa? Constitutional Engineering in a Divided Society (1991), he argued that incentives for pre-election compromise encouraging 'vote-pooling' or party appeals across ethnic boundaries is crucial for crafting a stable and less ethnically divisive constitutional order. For the purpose of achieving heterogeneous constituencies with limited possibility of a single party winning an absolute majority of first preferences in South Africa, multi-member constituencies were needed.

At that time, Lijphart asserted that this system would have had disastrous implications for stability and democratization in South Africa. His critique was based on three arguments. First, party coalitions within the legislature embody incentives to compromise similar to vote-pooling incentives before elections. AV is, in other words, not superior to list PR in this respect. Second, being a majoritarian system, AV resembles the majority run-off formula, which appeared highly unsatisfactory in European heterogeneous societies one century ago. Third, Lijphart maintained that AV does not mitigate the winner-take-all aspects of plurality systems, as Horowitz believes. The use of multi-member constituencies would make the system even less proportional and more majoritarian in character (Reynolds 1999a: 102). ${ }^{17}$

[^14]Among the three basic majoritarian formulas, AV is, in Lijphart's opinion, preferable to plurality and majority run-off elections, because, first, it selects a majority instead of a mere plurality winner, second, it chooses the majority winner more accurately, and, third, only one round of voting is conducted (Lijphart 2002: 48). Nevertheless, list PR remains the most appropriate system for divided societies. By now, he has been truly defending the consociational model for more than three decades. His dedication to proportional representation systems rests largely upon the view that they, first, have several features that are superior to other systems and, second, do not perform considerably worse on other criteria that are particularly well provided for by other systems. He argues that PR systems "almost invariably post the best records, particularly with respect to representation, protection of minority interests, voter participation, and control of unemployment" (1991a: 81).

Concerning the classic debate of PR versus plurality, Reynolds writes that the prevailing academic wind clearly blows in favor of the former and against the latter (1999a: 93). There are, however, a few authors that emphasize the virtues of SMP even in divided societies. Lardeyret (1991), for instance, asserts that the best way to counteract the tendency for organizing competitive politics along ethnic lines is to oblige members of each group to compete against one another in single-member districts. Proportional representation, he maintains, only reproduces ethnic cleavages in the legislature (1991:35). Joel Barkan (1988) is another advocate of SMP particularly in agrarian societies, irrespective of the ethnic composition. He argues that voters in agrarian societies tend to vote in geographical, highly homogeneous blocs. They focus on the basic needs of their local community, and evaluate parties and candidates in terms of their potential for constituency service.

By way of conclusion, it may be stated that there is no consensus among experts on which electoral system is the most preferable in ethnically heterogeneous countries. Proportional systems and AV are, nevertheless, regarded as more preferable than other systems. Similarly, TBM and BV are often considered the most inappropriate systems to divided societies. Most authors also agree that SMP is more suitable for ethnically homogeneous than for heterogeneous countries.

According to the theoretical arguments put forward in this section, ethnically and culturally fragmented countries should use proportional systems or AV in order to mitigate conflict and promote a peaceful collaboration between societal groups. The theory does not assert that this pattern is likely to be found in the countries of the world - it is first and foremost intended as a device for plural societies.

### 3.2.3.1.2 Country Size

Country size is a structural factor that affects political institutions and practices in a multitude of ways (see e.g. C. Anckar 2000; Dahl and Tufte 1973). In the earlier presented article 'Trade and Democratic Institutions', Rogowski (1987) touches upon the possible causal relationship between country size and electoral systems. He asserts that small countries are more likely to adopt PR than countries with a large population. The association is indirect: small countries tend to use PR because they are more dependent on trade (1987: 214-215). In addition, small countries tend to use large electoral districts. The effect of population is, again, through trade; its direct effect on constituency size is small (1987: 215-219).

A direct link between country size and electoral system choice has also been suggested. Rokkan (1970: 76-77) was the first to deal with this subject. He observed that the small democracies in Europe applied PR, whereas the larger ones had either rejected it or called its maintenance in question. All eleven smaller democracies in Europe, except for Iceland, had replaced majoritarian systems with proportional systems by 1922. Britain retained the plurality system, France switched back and forth between PR and majoritarian elections, and the PR arrangements in Germany and Italy were met with resistance and controversies. With reference to contemporary theoretical literature, Rokkan suggested that " $P R$ is tolerable in the smaller units because they face lesser loads of decision-making". In large countries, which are characterized by heavier burdens of responsibility, PR might be a disastrous solution (1970: 77).

In an article titled 'Small States in World Markets: Industrial Policy in Europe', P. J. Katzenstein (1985) deals with the association between size and electoral systems from another perspective. He argues that the more frequent adoption of PR in small countries reflects a search for consensus and compromise. Strive for unity is stronger in small countries than in large ones, which are characterized by zero-sum
politics. When universal suffrage was introduced, the small European countries opted for proportional systems because of their willingness to share power among disparate political actors.

Blais and Massicotte (1997: 109) provide still another explanation for the suggested link between size and electoral systems. According to them, there might be practical reasons for avoiding PR in large territories: a plurality system with single-member districts enables representatives to keep closer contact with those who have elected them. Large multi-member districts in large countries would seriously restrict the capacity of the candidates to reach the electorate during electoral campaigns and weaken the interaction between representatives and voters during the term of office. Their study of determinants of electoral formulas, presented in the beginning of the third chapter, suggests that the larger the territory, the more likely it is to have single-member districts. Population size is of minor importance. They find no association between size and electoral systems with regard to the dichotomy between plurality/majority and $\operatorname{PR}$ (1997: 116).
D. Anckar (2002) asserts that the suggested link between diminutiveness and PR is incorrect. By looking at the electoral arrangements in microstates, he concludes that smallness leads to plurality rather than PR. Among 40 countries with a population less than one million, the vast majority has adopted majoritarian systems. ${ }^{18}$ Hence, the theoretical arguments put forward by Rokkan, Katzenstein and Rogowski do not stand an empirical test that comprises all small countries of the world.

However, D. Anckar maintains that the prevailing pattern of plurality systems in microstates reflects colonial legacy and a process of diffusion rather than a consequence of size itself (2002: 4). On the basis of the theoretical arguments that directly concern size and electoral system choice, we may therefore propose the assumption that the larger the country the more likely the occurrence of a majoritarian electoral system.

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### 3.2.3.2 Actor-Related Problems

A study of electoral system choice cannot completely ignore the role of political actors. The sociopolitical, historical and geographical settings constitute a framework for choosing an electoral system but the choice itself is implemented by political actors. Irrespective of why a given electoral system is adopted, the decision is taken by politicians who pursue their individual interests above else. Their interests may be centered on furthering their political careers, or they may be focused on voters of their own districts alternatively the country as a whole. Nevertheless, each participant in the process of choosing an electoral system pursues specific policy goals. Hence, the final choice reflects the interests of individual political actors and negotiated settlements of political conflicts over the institutional design (Mozaffar 1998: 81).

The self-interest of politicians is, however, difficult to define. It cannot be defined solely as winning the next election, since this goal may be against long-term interests. One underlying interest of every responsible politician in democracies is preservation of stability, which may conflict with preferences based on individual success. Tradition and familiar examples from abroad also affect the mind of decision-makers. Some conclusions on the likely preferences of political actors can, nonetheless, be drawn. The preferences of self-interested politicians depend on their roles, which societal interests their parties represent, and whether their parties are rising or declining relative to others. Mozaffar asserts that politicians and parties prefer electoral rules that they think will lead to winning elections, or at least maximizing their legislative representation (1998: 84). Members of small parties, declining parties and parties with an uncertain future most likely prefer proportional representation. Large parties and established parties with a firm voter support, on the other hand, benefit from a majoritarian system that over-represents the largest parties.

An electoral system choice may, thus, be rational from two different perspectives. The choice may be rational with regard to, e.g. securing representation of several ethnic minorities by using a proportional system. The choice may also be rational regarding the preferences of political actors; i.e. each politician prefers electoral rules that will most likely guarantee success for himself and/or his party. A responsible political leader in a plural society may prefer list PR with large districts
and no electoral threshold in order to secure representation of several ethnic minorities, thereby promoting political stability and mitigating ethnic conflict. The power-seeking politician of a major party may, on the other hand, prefer SMP, because he knows that this formula will probably give his party a considerably larger seat share than vote share; hence, constraining the struggle for power to a few parties. The reasoning of both actors is rational, but from a different point of view. Both the responsible political leader and the power-seeking politician have specific goals in mind, and the realization of these goals is based on the expected outcomes of electoral rules.

In their study of electoral system choice and parliamentary elections in South Korea in 1988, David Brady and Jongryn Mo (1992: 405-429) regard the choice of electoral systems as the outcome of political competition among the participating parties. The goal of political parties is to maximize their seat share through the choice of electoral rules. In order to avoid a collapse of the political system, however, the opposition must be given a fair chance to succeed under the new rules. The majority party or coalition cannot inconsiderately force its first preference through without seeking acceptance from at least some minority parties. The final choice should, in other words, be viewed as legitimate.

The range of electoral systems is, nevertheless, constrained by local political conditions and traditions. Certain systems might be omitted from the menu for several reasons. A country may have had bad experience of a particular system, and other systems may not be relevant options simply because they are unfamiliar. A third condition that influences the bargaining over electoral systems is uncertainty of the outcome of elections under the new system. In addition, the outcome may be affected by exogenous factors such as campaign resources and the emergence of new issues (1992: 406-407). Brady and Mo conclude that the final agreement on the new electoral system in South Korea - mixed-superposition was a compromise between the desire of the largest party (DJP) to create a system that would secure them a majority and the constraints placed on them by, first, public opinion and, second, the need for an electoral system that other participants would accept (1992: 425). Thus, the new electoral system was a rational choice with regard to both the largest party and to the stability of the political system.

Mozaffar also points out that political conditions and traditions restrict the range of choices for political actors. Decisions on electoral rules are certainly implemented by politicians but the contextual environment sets certain limits on the freedom of choice. "Institutional choice is", in Mozaffar's words, "tempered by the structuralhistorical context that defines the conflicting interests and power relations of contending actors, informs their institutional preferences, and constrains their strategies in bargaining over new electoral systems" (1998: 81).

Birch, Millard, Popescu and Williams (2002) deal with the interest of political actors as one of four basic approaches to electoral system design. Most actors are assumed to have self-interested goals in addition to their obligation towards promoting the collective good. Again, reference is made to Rokkan (1970): major electoral reforms occur when an alternative system is likely to produce larger seat share for one or several parties that have the power to implement an electoral reform. Two different classifications apply: interest-based models can be classified, first, according to the types of actors assumed to be involved in the decision-making process, and, second, according to the goals those actors are held to seek. A difference is also made between strategic decision-making at the founding stage and post-zero-stage bargaining. A large degree of uncertainty about electoral outcomes prevails when a new state emerges or when a transitional period is in progress. After the first elections under the new electoral system, the strategic context is altered. Uncertainty decreases, actors become better aware of how to pursue their interests, and successful contestants become institutionally embedded in the legislative structures. Another electoral reform may well take place between these two stages, but thereafter, electoral systems are expected to become 'sticky' (2002: 16-22).

A few years ago, Boix wrote that there are yet only two seminal works on what causes the high degree of cross-national variations in electoral laws. These are Citizens, Elections, Parties: Approaches to the Comparative Study of the Processes of Development by Rokkan (1970) and 'Trade and Democratic Institutions' by Rogowski (1987). Boix (1999) emphasizes the different strategies that political actors pursue, depending on certain conditions and constellations. His theory of the selection of electoral systems is largely based on the 'Rokkan hypothesis'. However, Boix argues that Rokkan's argument is under-specified. Rokkan does not indicate the conditions under which policymakers will feel sufficiently
threatened to change the current electoral rules. Why, for instance, did Britain introduce universal suffrage without adopting PR (as did Denmark and Sweden)? Why have certain countries shifted back and forth between majoritarian and PR systems during the last century? A third problem, according to Boix, is that Rokkan's explanation is too historically bounded. The adoption of PR in Europe a century ago is associated with the rise of socialism - a factor that is not relevant to electoral system choice in post-authoritarian Latin America, post-Communist Eastern Europe and democratizing countries today (Boix 1999: 610).

In his study of electoral system choice in 23 developed democracies, Boix shows that electoral systems derive from the decisions that the ruling parties make to maximize their representation. As long as the electoral arena remains unchanged and the ruling parties are favored by the current rules, the electoral system is not altered. As the electoral arena changes, electoral reform becomes desirable for the ruling parties. The type of electoral reform that is preferred depends on the strength of the new parties and the coordinating capacities of the old parties. When the new parties are weak, the majoritarian system is maintained. When the new entrants are strong, a PR system is adopted if no old party enjoys a dominant position. However, if there is a dominant old party, an electoral system change is not likely to take place (Boix 1999: 609-624). Electoral system choice is, hence, determined by strategic calculations of the old-established parties. These calculations are, in turn, based on suffrage extension, the electoral arena, and power constellations between the old parties internally as well as between old and new parties.

This work is not concerned with strategic calculations of political actors or decision-making concerning the adoption of electoral systems. Nevertheless, the prevailing conditions in the bargaining process are related to a structural dimension, namely the party system, which is relevant to the present study. The aforesaid suggests that the result of a negotiating process with two main competitors - or in other words, two main political parties - will most likely be a majoritarian system. Likewise, we may expect a proportional system to be adopted, if many participants - i.e. many political parties - take part in the decision-making process. In other words, the structure of the party system may be regarded as an explanatory factor. The party system is consequently both an actor-related and a structurally generated problem. It is primary an actor-related matter and secondary a structural phenomenon, because the party system consists of political parties that
make decisions on the electoral rules, but the decision depends on the number of participants and their mutual strength. Of course, the decision depends on other factors as well - the level of uncertainty for instance - but as to the structural dimension, the party system is decisive. In the next section, the importance of party system structure is theoretically examined.

### 3.2.3.2.1 The Influence of Party System Structure

The influence of electoral systems on party systems has been given much attention. Fragmented party systems are considered as a consequence of PR, whereas twoparty systems are regarded as the product of plurality systems. Duverger (1951) was the first to present theoretically founded arguments for the relationship between plurality systems and two-party systems. In his seminal work Les Partis Politiques, he also maintained that the two-ballot majority formula and proportional systems favor multi-party systems, although he regarded the influence of the two-ballot as rather difficult to define (Duverger 1964: 239). Later research has shown that the effect of the two-ballot formula on party system structure is more similar to that of plurality systems than that of proportional ones. The defractionalizing effect of plurality systems and fractionalizing effect of PR on party systems has been frequently confirmed (e.g. Grofman and Lijphart 1986; Lijphart 1994; Rae 1967; Taagepera and Shugart 1989).

However, there are those who maintain that the direction of causality is reversed. The choice of electoral system is determined by the party system, which, in turn, is shaped by the social cleavages within a society. This insight belongs to the sociological approach (e.g. Lipset and Rokkan 1967) as opposed to the institutional approach that stresses the influence of electoral structures on party competition. Arguments for reversed causality between electoral systems and party systems were also put forward before Lipset and Rokkan published their classical work on party systems and social cleavages. In opposition to Duverger's propositions concerning the effects of electoral systems (1951; 1964), John C. Grumm asserted that " $P R$ is a result rather than a cause of the party system" (1958: 375).

In a discussion on the impact of electoral systems on representative government, Eckstein (1963: 247-254) concludes, among other things, that simple generalizations about plurality and proportional systems are bound to be
inadequate since electoral systems vary in many important ways within the same basic category. The argument that particular environments in which electoral systems are used decide their consequences falls short, because we do not know (in 1963) what the conditions are that may nullify or reverse the logical tendencies of electoral rules. Rather than settle for W.J.M. Mackenzie's (1957) recommendation to give up comparatively tested generalizations and to merely present descriptive surveys of particular electoral processes, Eckstein suggests the proposition that "electoral systems do not in fact have important consequences for other aspects of the political process but only express, whatever their character may be, the deeper determinants of the politics of a society" (1963: 253). For instance, the two-party system in the United Kingdom is, according to Duverger's sociological law, a consequence of the SMP formula. In the same way, the proportional system is assumed to have given rise to the fragmented and radicalized political party life under the Weimar Republic (see e.g. Hermens 1941). How does we know, Eckstein (1963: 253) asks, that it was the particular electoral systems in use that had the consequences attributed to them and not any other features of these societies, independent of the electoral systems?

Two decades later, Bogdanor wrote that any theory that emphasizes the electoral system as a fundamental determinant in shaping party systems cannot be sustained (1983: 254). He argued that "electoral systems must be understood against the background of a society's historical development, which is in turn profoundly affected by political choices" (1983: 261). The dynamics of electoral systems and party systems constitute a complex and reciprocal entity - a point to which I shall return shortly.

Referring to a thesis by Nohlen (1993a: 27), Gary W. Cox writes that the number of social cleavages affects not only the number of parties but also the kind of electoral system (majoritarian or proportional) a given country chooses (1997: 19). Following Grumm (1958), he argues that the greater the social fragmentation, the more likely the emergence of a multi-party system and the adoption of a proportional electoral system. The greater the social homogeneity, the more likely the choice of a plurality system and the emergence of a two-party system or, at the most, limited party pluralism (Cox 1997: 19).

Stanislaw Gebethner also supports the view that party systems precede electoral systems. Where multi-party systems already exist, he argues, PR is likely to be chosen in order to maintain political stability by avoiding large vote-seat discrepancies and preventing winner-take-all politics, or saving minority parties from eternal exclusion from power (1996: 59). In his study of electoral system choice in Poland after the collapse of Communism, he points out that there is no possibility of creating a well-functioning two-party system in post-Communist countries; it could eventually lead to an authoritarian system of government. PR is the only way to incorporate the majority of the various political groups and create political stability (1996: 73-74).

In a recently published article, Colomer (2005) argues that the number of parties explains the choice of electoral systems rather than the other way around, thereby turning the Duverger's laws upside down. He presents the concept of 'behavorialinstitutional equilibrium' with regard to the relation between party systems and electoral systems. The behavorial approach suggests that political actors adapt to the prevailing electoral rules by making new efforts of collective action, spliting from parties or entering previously existing parties in order to obtain electoral success. The institutional approach is concerned with the ability of political parties to bring about a change in the electoral rules, the primary alternatives being a majoritarian or a proportional system (2005: 1-3). His dataset comprises 219 elections since the nineteenth century in 87 countries with some democratic experience. By comparing the level of party system fragmentation in 37 countries prior to electoral system change from plurality/majority to PR (or mixed systems) with 33 countries that use majoritarian systems in periods of electoral system stability, Colomer finds proof of the hypothesis that party systems determine electoral system choice. The 'effective number of parties' (see section 3.3.1.3 for a description) is 3.9 and 2.8 respectively. The analysis suggests that there is a statistically significant relationship between the number of parties and the probability of an electoral system change from plurality/majority to mixed/PR (2005: 9-13).

For each country in the comparison group of 'stable' electoral systems, Colomer has chosen the earliest initial electoral experience under the majoritarian rule. However, I find the decision to regard the first experience of an electoral system as a stable environment rather dubious. As mentioned in the previous section,
electoral reform is likely to occur after the first elections but less likely after the second elections, which means that the first elections are often held in unstable circumstances with regard to the electoral institutions (Birch et al 2002: 16-22). Moreover, several subsequent democratic elections are usually required to provide a stable institutional setting for the purpose of studying effects of electoral systems. Colomer also provides data on the latest elections in all countries that are included in the study. The average 'effective number of parties' among majoritarian systems is 3.6, which he regards as an indicator of party systems becoming more fragmented over time. However, this sample might also be more appropriate for comparing the level of party system fragmentation (3.6) among majoritarian systems with the level of fragmentation (3.9) among cases of electoral system change. Such a comparison would suggest that the influence of party systems on electoral system choice is rather insignificant. Notwithstanding, the assessment that proportional systems will be even more popular in the future is strongly supported by the empirical data (Colomer 2005: 9-18).

Several authors have emphasized that social and electoral structures interact in the process of party formation and maintenance (see e.g. Bogdanor 1983: 261; Taagepera and Shugart 1989b: 53). Nohlen (1996: 45), for example, asserts that there is a circular causal relationship between the electoral system and the party system. Although electoral rules certainly affect the party system, the selection of the electoral system itself depends to a great extent on the party system as it exists when decisions on electoral system choice are made. Lijphart (1991a: 73) points out that plurality elections certainly favor the maintenance of a two-party system, but an existing two-party system also favors the maintenance of plurality, which gives the two main parties great advantages that they are unlikely to abandon. Peter Ordeshook and Olga Shvetsova (1994) have found that the number of parties in a country increases with both the fragmentation of the social structure and with the proportionality of the electoral system, but also that these factors interact. Increased proportionality produces more fragmented party systems in heterogeneous societies but not in homogeneous ones. In the same way, increasing the cultural heterogeneity in a majoritarian system does not affect the party system, whereas it does so in a proportional system. Both social cleavages and electoral structures obviously matter.

According to the theory of party systems and their effect on electoral systems, countries that adopt proportional systems should have fragmented party systems and countries that adopt plurality systems should have few relevant political parties. However, the degree of party system fragmentation can be accurately measured only in countries that have already held elections, which implies that cases of electoral system change must be analyzed. Consequently, the expected causality is likely not to emerge, since electoral rules affect the party system structure, i.e. countries that have previously held elections under PR are likely to have fragmented party systems and vice versa. Therefore, the following assumption is made: countries that replace plurality with proportional systems have more fragmented party systems than countries that retain plurality systems, and countries that replace PR with plurality elections have less fragmented party systems than countries that stick to proportional elections. ${ }^{19}$

### 3.2.3.2.2 The Dynamic of the Democratization Process

The introduction of PR in continental Europe consisted of a 'minority protection' phase as well as an 'anti-socialist' phase. The former was concerned with providing minority representation in multicultural societies as a means of counteracting potential threats to national unity and political stability. As a consequence of extended suffrage, demands for proportional elections were heard in homogeneous countries as well. The introduction of PR came about as " $a$ convergence of pressures from below and from above. The rising working class wanted to lower the thresholds of representation in order to gain access to the legislatures, and the most threatened of the old-established parties demanded $P R$ to protect their position against the new waves of mobilized voters created by universal suffrage" (Rokkan 1970: 157). Anxious about a complete socialist takeover, a switch from all-or-nothing majoritarianism to PR would at least deliver a modest return for the old parties. Andrew Carstairs (1980: 215) points out that wherever PR was recognized as a practical possibility, the social democrats and the socialists tended at first to be in favor of an electoral reform. However, when the social democrats realized that the introduction of universal manhood suffrage would most likely give them the status of a major or dominant party, they turned against such a reform. The bourgeois and non-socialist parties became now the

[^16]main advocates of proportional representation. Thus, PR constituted a rational solution with regard to both the preferences of political actors and the needs of culturally heterogeneous societies.

In a study of constitutional choices in some Eastern European countries after the breakdown of Communism, Lijphart (1992a: 207-223) finds that the 'Rokkan hypothesis' of demand for PR as a consequence of the democratization process still applies. Both the old Communist parties and their challengers in Czechoslovakia, Poland and Hungary needed PR to protect their interests when democracy evolved in the beginning of the 1990s. The post-Communist transition gave representatives of the old regime reason to consent to electoral reform in favor of proportional representation once they realized that their position was under serious threat.

The demand for PR at the turn of the twentieth century was partly a consequence of the extended suffrage. In Eastern Europe, however, universal suffrage had, at the time of the Communist collapse, prevailed for a long time. Instead, the demand for proportional elections was a result of another crucial element of the democratization process, namely the right to establish political parties and participate in popular elections. During the Communist era, the use of majoritarian systems was self-evident, since elections were non-competitive. The democratization process resulted in a large number of parties and, consequently, a switch from majoritarian to proportional elections. More specifically, we may speak of party system transformation from a one-party system to a multi-party system. ${ }^{20}$ The crucial feature is the end of one-party rule and the right for citizens to form political parties. During the time period that this study covers, universal suffrage has been a common feature for most of the independent countries in which parliamentary elections have been held. This matter is, hence, not included in the empirical analysis. Instead, transformation from a one-party system in which other political parties are not allowed to compete to a competitive party system represents the dynamic of the democratization process.

Party system transformation is foremost an actor-related problem but has a structural dimension as well, which justifies the inclusion of this variable in the

[^17]study. As long as all seats are allocated to candidates from a single political group, there is no need to manipulate the electoral system in order to maximize the electoral support - majoritarian elections are naturally applied. When the ban on political parties is abolished and competitive elections are introduced, the electoral system becomes an effective manipulative instrument for the political actors, especially the ruling party, which is concerned about retaining as much as possible of its former power position. Simultaneously, party system transformation is a structural phenomenon: absolute one-party rule is replaced by a multi-party system and a competitive political arena.

The assumption is, to sum up, as follows: countries that end one-party rule and allow competitive elections are expected to adopt mixed or proportional electoral systems. This is primarily regarded as a consequence of the (former) ruling party afraid of losing power if a majoritarian winner-take-all system is maintained. In addition, the new parties may feel insecure about their possibilities of electoral success, and as a consequence, prefer proportional seat allocation.

### 3.2.4 Culture and History: Patterns of Diffusion

The second approach maintains that electoral systems, as well as other constitutional and institutional features reflect the cultural and historical contexts to which they belong. This point of view has been stressed, among others, by Lijphart (1991a; 1992b) and Lipset (1992). In Lijphart's introduction to Parliamentary Versus Presidential Government (Lijphart 1992b; 1992c), the congruency between particular constitutional regimes and sharply delineated cultural-regional settings is emphasized. In the same volume, Lipset (1992: 207211) brings out the importance of political culture with respect to democratic tradition. With reference to Belize and Canada as the only states in the mainland region of the Americas having other executive systems than the limited presidential, D. Anckar maintains that regime diffusion "may also be a consequence of a colonial past, countries adopting the constitutional models of former metropolitan powers and diffusion thereby rather being an expression of culture as tradition" (2004: 207). A bird's eye view on the map of the world suggests that electoral systems are also dependent on the cultural, historical and regional context. Proportional systems dominate in South America and Europe,
whereas majoritarian systems prevail in the Caribbean, the Pacific, and large parts of Asia.

The concept of diffusion is a complex matter, and the way it is approached in this study is derived from a greater context. Diffusion is concerned with a familiar problem in the social sciences, usually referred to as 'Galton's problem', which is the methodological problem of sorting out emulation of social and political phenomena from other causes of variance in social systems (Peters 1998: 42). The task of determining what is a process of diffusion and what is not is basically a matter of operationalization, which is provided in section 3.3.2. In trying to explain the spread of democracy and its considerable shallowness, Diamond (1999) presents five models of diffusion. The first one is called the power model: the most powerful democracies of today press the formal model of electoral democracy on the weaker states over which they have influence. The second model rests on more comprehensive efforts on the part of established democracies as well as international organizations. The third model of diffusion is concerned with imitation of political models that are perceived as highly successful, powerful, and prestigious. The fourth model rests upon normative judgements about what is intrinsically good, right and desirable. The fifth model encompasses to some extent the other four but includes a trend towards global standardization, i.e. cognitive models that have produced increasingly similar state structures (Diamond 1999: 56-58).

Diffusion of electoral systems is not, of course, the same as diffusion of democracy. Democracy is a process, which is established and consolidated often during a long time, whereas an electoral system is a set of formal rules on how to manage elections. The frame of reference above is, nonetheless, useful in determining what electoral system choice emanating from diffusion implies. In order to broaden our knowledge of diffusion as an explanatory factor of political phenomena, I shall present another theoretical frame of reference that partly overlaps with the framework above.

In an article on diffusion of public policy, Kurt Weyland (2005: 262-295) presents a theoretical framework of policy diffusion that consists of four alternative models: foreign pressures, symbolic and normative imitation, rational learning, and cognitive heuristics. More specifically, the essay aims at exploring which of these
approaches drives waves of diffusion most. The explanatory framework may be summarized in the following way. A policy innovation emanates either from external pressure or domestic initiative. The latter may take two forms: a quest for legitimacy or a pursuit of interests. Finally, rational learning and cognitive heuristics are two alternative types of pursuing interests (2005: 269). These models are theoretically as well as empirically analyzed, the empirical evidence coming from the area of social security reform in Latin America. Nevertheless, the analytical framework bears relevance to other areas of diffusion as well, institutional choice being one of them.

Weyland points out that processes of diffusion have three major characteristics; diffusion occurs in a distinct wave, it tends to have a clear geographical concentration, and it produces commonality in diversity. The wavelike process yields an S-shaped pattern by starting slowly, then gathering speed, and finally tapering off. In spatial terms, it initially spreads through the region in which the innovation was born, and thereafter reaches other parts of the world. In substantive terms, diffusion entails the adoption of the same innovation in diverse settings (2005: 265-269).

The external pressure model is concerned with the influence of powerful external actors, particularly international organizations, on single countries by means of incentives, sanctions and coercion. While acknowledging the significance of external pressures in some contexts, the author maintains that the capacity of this model to explain all basic features of diffusion is rather limited (2005: 269-272).

The normative imitation approach regards the import of advanced innovations as an attempt by the decision-makers to gain international legitimacy as well as an ambition to demonstrate the country's modernity and accomodating to international standards. Weiland (2005: 270) argues that "the desire to impress global public opinion ... ...drives the rapid spread of innovations". Countries tend to keep up with new trends before they have enough information on the likely effects of the reform. This model succeeds rather well in explaining different aspects of policy diffusion, particularly the puzzle of commonality amid diversity (2005: 270-275).

The rational learning model sees political action as a goal-oriented choice driven by decision-makers' self-regarding interests. If a promising foreign model is identified and its superiority over established policies is confirmed by means of cost-benefit analysis, the model is likely to be adopted. However, the model confronts difficulties in explaining both commonality in diversity and the geographical clustering of diffusion (2005: 270-279).

Deriving from cognitive-psychological theory, the cognitive heuristics model also regards diffusion as a consequence of goal-oriented activities driven by selfinterests of political actors. However, in contrast to the rational learning approach, the cognitive heuristics framework maintains that external models are attractive because of their apparent promise to solve problems rather than their demonstrated success. "Since attention is finite and scanning the environment for relevant information is costly, people simply cannot meet the ideal-typical standards of rational choice" (2005: 282). This approach stands out as superior to the other three models in explaining the three main features of diffusion, i.e. its temporal sequence, its geographical clustering, and its substantive nature of spreading commonality midst diversity (2005: 271-287). This conclusion is supported by empirical evidence (2005: 287-294). Finally, Weyland (2005: 295) maintains that the cognitive heuristics approach to explaining diffusion has wider theoretical significance. It sheds light on political phenomena in the real world and broadens our understanding of political decision-making.

It should be observed that no analysis of diffusion in its proper sense is provided in the present study. A case study of each process of diffusion is out of the scope of the dissertation. ${ }^{21}$ Consequently, I shall not compare these four explanatory models and make conclusions on how well they are capable of explaining existing patterns in the world of electoral systems. The empirical analysis is restricted to observing whether processes of diffusion have occurred or not. The theoretical discussion above is nevertheless important to the understanding of diffusion as a general explanation of institutional choices. Furthermore, it lays down the general outlines for an operationalization of diffusion.

[^18]Three variables within the cultural and historical approach are examined: colonial diffusion, regional diffusion and temporal diffusion. Timing of independence, mentioned by Anckar and Karvonen (2004: 8) as the third factor within the cultural and historical perspective, is of secondary importance in this context. The timing of independence certainly coincides with timing of electoral system choice to a great extent, since a country usually adopts an electoral system and holds elections when it becomes independent. However, by paying attention to the year of independence, we do not observe electoral system changes. Therefore, timing of electoral system choice as an indicator of temporal diffusion is more appropriate. Colonial, regional and temporal diffusion represent different forms of imitation that together comprises the three main characteristics of policy diffusion presented above.

Colonial diffusion of electoral systems shows similarities to the external pressure model in Weyland's (2005) theoretical framework of policy diffusion. Electoral systems are transferred from a colonial power to countries that do not necessary share the same characteristics that otherwise would explain the adoption of similar institutions; thereby dealing with commonality amid diversity. Regional diffusion is concerned with the geographical clustering of similar reforms. Temporal diffusion comprises the wavelike spread of policies and institutions.

Returning to the analytical framework by Diamond (1999), some models are obviously more appropriate for the purpose of this study. The transfer of an electoral system from the colonial power to its colony resembles the power model: powerful countries have introduced their electoral systems to countries over which they hold sway. Regional diffusion corresponds to the third model: the choices of successful and powerful countries tend to be attractive to smaller and less prestigious countries. The second, fourth and fifth model described by Diamond are to a much less extent concerned with electoral system choice as a consequence of diffusion. The distinction between colonial legacy on the one hand and regional influence on the other appears, in the light of Diamond's frame of reference, natural and justified.

### 3.2.4.1 Colonial Legacy

Colonial legacy is often emphasized as a central determinant of electoral system choice. The colonial empires left to varying extents behind political traditions and political institutions that reflected their own constitutional models. The United Kingdom in particular, which along with France possessed the largest colonial empires, is said to have implemented political traditions and a political culture that has been beneficial for its colonies in the post-colonial period. Other foreign rulers were Spain, Portugal, the Netherlands, Germany, Italy, Australia, New Zealand, the United States and Japan. In several colonies, the electoral system was introduced by the colonial powers, and at time of independence naturally chosen as the only familiar option. In other colonies, the electoral system choice was often a result of imitation. The training of local elites in the metropolis brought them into contact with a specific set of electoral arrangements that they were later inclined to emulate in their own country.

However, all former colonies have not adopted the electoral system of their colonial rulers. According to the literature on electoral systems, it is notably the electoral systems of many former British territories that are regarded as a colonial legacy. Also many electoral system choices in former French colonies are considered a product of French colonial rule. Reilly and Reynolds (1999: 23-24) point out that most of the former French territories use either the contemporary French electoral system, i.e. TBM, or list PR, which France has applied in parliamentary elections 1945, 1946 and 1986, and widely in municipal elections. Furthermore, the authors observe a clear pattern of proportional systems in Spanish-speaking countries as well as in Portugal and the Lusophone countries. TBM, which was used in the Soviet Union, is dominant among the former Soviet Republics of the Commonwealth of Independent States (1999: 23-24). In the following, I shall shortly deal with the different colonial empires and the matter of colonial legacy as a determinant of electoral system choice.

The process of modern colonization started in the late fifteenth and early sixteenth century when Spain and Portugal conquered Southern and Central America, including the Caribbean. Britain and France took later on control of the Caribbean islands, whereas most of the Latin American territories received independence at the beginning of the nineteenth century. Of the African colonies, Equatorial Guinea
and Western Sahara belonged to Spain, and Mozambique, Sao Tome \& Principe, Angola, Cape Verde and Guinea-Bissau were under Portuguese rule. In the seventeenth century, the Netherlands became a major colonial power, possessing territories in coastal Latin America, Africa and South East Asia. Indonesia and Suriname proclaimed independence from the Netherlands in 1949 and 1975 respectively.

The United Kingdom possessed the largest colonial empire. More than 50 nations have received their independence either directly from Britain or from League of Nations mandate under British administration. Today, most of these countries belong to the Commonwealth of Nations. The British conquest of colonies began in the early seventeenth century with the colonization of North America and some Caribbean islands. By the end of the nineteenth century, large parts of Africa, the Caribbean, the South Pacific, Middle East and South Asia were under British rule. France became Britain's main competitor during the dominant era of imperial expansion, between the 1770 s and the 1920s. France possessed colonies mainly in Africa and South Asia. 26 countries have received independence directly from France. The major part of British and French Africa was decolonized in the 1960s. The French empire in South Asia ended in the 1950s, whereas the British territories in the Caribbean and the South Pacific were granted independence between 1962 and 1983.

The Philippines achieved independence in 1946 after half a century under American rule. Other sovereign states that have formerly been ruled by the United States are the Federated States of Micronesia, the Marshall Islands and Belau. Former Australian territories are Nauru and Papua New Guinea, whereas Western Samoa declared independence from New Zealand after having been administered as a trust territory. Belgium's colonial empire was located in Central Africa, consisting of Belgian Congo, Burundi and Rwanda. These countries became independent in 1960 and 1962. Libya received independence in 1951 from Italy. The Somali Republic was founded in 1960 as a merger from British Somaliland, which became independent from Britain, and Italian Somaliland, which became independent from the Italian-administered UN trusteeship. Germany and Japan lost all their territories by the end of World War II to the allied powers (Derbyshire and Derbyshire 1989: 765-772).

Different colonial powers administered their societies differently. For instance, the impact of British colonial rule is commonly regarded as positive and developmental, whereas colonial rule by the Spanish and Portuguese is considered intrusive and exploitative. Administration patterns by the same colonial power also varied between different territories, depending on what the colony had to offer. While most British colonies were indirectly ruled, Burma was governed directly by the British and has been more authoritarian since independence than most of the other former British colonies. Likewise, Spanish and Portuguese control in colonies with small slave markets and poor mineral resources was less penetrating and authoritarian than Iberian colonial rule in general (Diamond and Lipset 1995: 263). Rudolf von Albertini (1982: 489-490) points out that the difference between French centralization and direct rule, on the one hand, and British decentralization and indirect rule, on the other, should not be exaggerated. In practice, the boundaries between the two were fluid. At various times and places, both systems were employed by all colonial powers. In Cambodia and Laos, for instance, France practised indirect rule.

However, the concepts of direct or indirect rule are important as indications of divergent aims of the colonizers. British colonial administration was to a large extent based on indirect rule. They established the rule of law through effective (and indigenous) bureaucratic and judicial institutions, as well as the provision for some system of representation and election, which gave native elites experience in political leadership and limited governance (Weiner 1987). As a consequence, democratic politics has managed to evolve and survive in large parts of the former British Empire. The resulting legacy was, according to Myron Weiner, effective political institutions and an enduring cultural commitment to the procedures of democratic politics and governance, as well as to the rule of law as a constraint on government. Especially the early British colonization of Asia and the Caribbean, along with some other islands such as Mauritius, has been advantageous to these countries by giving them long and deep contact with British values and institutions as well as more time for the gradual emergence of indigenous representative institutions. In continental Africa, on the other hand, British colonization occurred later and its withdrawal was more hurried. Consequently, British influence on postcolonial government was weaker in these countries (Diamond and Lipset 1995: 263). The slow movement from British supervision to local leadership that
occurred in most parts of the British colonial empire promoted the development of parliamentary democracy.

French colonial rule gave also rise to democratic traditions and values in some countries but not to the same degree as British colonial rule. Contrary to British colonial practices, France governed its colonies directly from the capital. Traditional rulers were usually undermined and replaced by 'straw chiefs' that served at the bottom of the colonial administrative hierarchy. The colonies were strongly tied to France, and little attention was paid to the development of indigenous political and administrative abilities. Not until 1956, broadly elected indigenous assemblies were established in its African territories. Despite the differences in colonial policies, both Britain and France left behind political institutions that reflected their own constitutional models. Diamond and Lipset (1995: 266) write that the British transferred their parliamentary system and their electoral system of single-member districts, whereas the French transferred the presidentialism of the Fifth Republic and provided for assembly elections with party lists on winner-take-all basis. Furthermore, British colonization resulted in constitutions with emphasis on dispersed power and autonomous local government, whereas France gave its colonies centralist and unitary constitutions.

The legacy of Spanish and Portuguese colonization in Latin America is quite difficult to assess, since almost two centuries of independence have seen the colonial heritage recede in importance. Political instability and lack of democratic politics have characterized most of the Latin American countries. Those countries (Chile, Costa Rica and Uruguay) in which Spanish colonial presence and influence were weakest have been most successful in maintaining democratic politics (Diamond and Lipset 1995: 264). Portugal was the most repressive of all colonial powers in Africa. When the Portuguese were forced to withdraw from its colonies in the mid-1970s, practically no preparation for independence had been made. Neither was the Belgian Congo prepared for self-government when Belgium had to give up its intention of holding on to the colony indefinitely in 1960. All former Portuguese and Belgian colonies in Africa have, as a consequence of intrusive and exploitative colonial politics, been characterized by extensive repression, ethnic turmoil, and political instability during the post-colonial era (1995: 267).

The Australian and American colonial rule resembles the British pattern, especially in Papua New Guinea and the Philippines respectively. The Americans put a lot of effort into training the Filipino people in democratic citizenship. They left behind some important developmental and institutional legacies, which unfortunately had to struggle against the autocratic legacy of four centuries under Spanish colonial rule (1995: 265). The other American colonies had slightly more than one decade of experience of representative politics when full sovereignty was achieved in the early 1990s. By using AV in three pre-independence elections, the highly fragmented society of Papua New Guinea was well consolidated when independence was attained in 1975. In Nauru, legislative and executive organs were established shortly before the small island became independent in 1968.

If colonial legacy matters to electoral system choice, former colonies are expected to adopt the electoral system that the colonial power used when independence was received, or the electoral system that the colonial power had earlier established in the colonies. Which electoral formulas and systems that qualify as transfer from the colonial powers to the former colonies is dealt with in section 3.3.2.1.

### 3.2.4.2 Regional Influence

In social science, the idea of diffusion means that properties exist in a society as a consequence of influence from other societies rather than as a consequence of some particular circumstances in the society in question. In other words, institutional choices are made by imitating institutional choices of other countries. Transfer of institutions naturally takes place from other countries than colonial powers as well. Which countries that may serve as models to countries in the process of constitution building depends on several factors. Countries with a similar culture and nearly located countries are often imitated. Samuel Huntington writes about demonstration effects, or snowballing: countries that are geographically proximate and culturally similar are most likely to imitate each other (1991: 102). Powerful countries have also served as models to newly independent countries. In some countries, the electoral system has been imposed by foreign powers. Countries may, furthermore, make the same institutional choices as other countries with similar sociopolitical conditions. In this respect, diffusion is not the opposite of rationality, even though they constitute two different explanatory models of institutional choice.

When political institutions are adopted, it is natural to look for institutional arrangements in neighboring countries. Most countries cooperate with their neighbors in several ways, especially in the political and the economical fields. Moreover, neighboring countries often share a similar culture. Therefore, in the difficult process of constitution building, countries tend to imitate the institutional choices of nearly located countries. A further reason for this tendency is that the knowledge of electoral rules is often limited. Some options may not be seriously considered because of unfamiliarity and uncertainty as for their consequences. The institutional arrangements of neighboring countries are, consequently, likely to be imitated. In addition to geographic and cultural factors, a psychological effect may also be present. Not every neighbor is expected to serve as a model in the constitution making process. Some countries are more prestigious than others are; those countries that have political, economical and military power are those that will most likely be imitated.

Political tradition is, according to Bogdanor (1983), the main determinant of electoral system choice. The concept of political tradition corresponds to different processes of diffusion - colonial legacy and geographical location being the most important. Bogdanor maintains that there is a striking dividing line between countries that use the plurality system and those applying PR systems. Plurality systems exist in countries that have been influenced by Britain, i.e. Commonwealth countries, the United States and Britain herself, whereas every democracy in continental Europe except France applies a list system. The only Commonwealth countries that have adopted proportional systems are Guyana and Sri Lanka. The single transferable vote method of proportional representation, applied only in Ireland and Malta, is referred to as the 'Anglo-Saxon' method of proportional representation (Bogdanor 1983: 2).

The political systems in Latin American countries are usually considered a result of diffusion. When the South and Central American countries became independent in the early nineteenth century, the presidential model of the United States was practically the only model available (Lijphart 1992b: 25). The adoption of PR during the first half of the twentieth century was carried through in collaboration with European electoral engineers. In both Europe and South America, proportional representation was considered the most democratic electoral system; it
represented the "wave of the democratic future" (Lijphart 1991a: 75). Similarly, the evolution of electoral systems in Western Europe may be seen as a product of diffusion. Prior to the electoral reform in Belgium 1899, all Western European countries applied plurality or majority systems. By the mid-1920s, all countries except for Britain and France had introduced proportional systems. In addition, the adoption of PR in those countries that initially applied plurality systems was, with a few exceptions, preceded by an intermediate phase of majority elections. There are certainly other explanations for the introduction of PR in Europe but a tendency of imitation was surely present as well. When some countries switched to PR, others tended to follow. In an article that examines the effects of electoral systems on party systems in a post-Communist context, Robert G. Moser (1999: 365) points out that mixed systems are frequently used in this part of the world, and he regards Germany as the primary source of influence.

External imposition of electoral systems by foreign powers occurred in some countries after World War II. The attempt of securing a peaceful and stable democratic future for West Germany by imposing a mixed electoral system, which combines constituency representativeness with proportional representation, is probably the foremost example of electoral system design resulting from external imposition. It was designed by the allied powers to avoid the apparent mistakes of the Weimar period. According to Reilly and Reynolds, external imposition also occurred in Austria, Japan and South Korea (1999: 9). The introduction of list PR in Namibia in the late 1980s is likewise regarded a case of external imposition. The rationale for a nationwide list system, as a means of trying to calm warring factions, came initially from the United Nations, and South Africa played later on a great role in designing Namibia's electoral system (1999: 26).

Notwithstanding, this kind of electoral system choice remains quite rare. It occurs only in extraordinary circumstances when the previous system has caused serious damages inside as well as outside the country borders. On the one hand, external imposition of electoral systems is a process of diffusion. A model of electoral arrangements is transferred from one part (or several parts) to another. On the other hand, the transferred system must not necessarily exist in another country, which is one of three criteria of regional diffusion stipulated in section 3.3.2.2. The German system, for instance, did not exist elsewhere when it was externally imposed in 1949. It was deliberately designed by foreign powers with particular goals in mind.

In this sense, external imposition is closer to a rational explanation than a process of diffusion. Accordingly, I shall not regard external imposition of electoral systems by foreign powers as a process of regional diffusion. By way of conclusion, the assumption concerning the regional diffusion variable and electoral system choice is that a country's choice of electoral system is influenced by a prestigious and culturally similar country in the same region.

### 3.2.4.3 Epoch Phenomenon

The third way of dealing with electoral system choice within the cultural and historical context is to regard it as an epoch phenomenon, and observe possible trends concerning the adoption of electoral systems. Basic constitutional patterns are largely products of early statehood (Anckar and Karvonen 2004: 8). Consequently, the adoption of certain electoral systems may be linked to certain periods and eras.

Reilly and Reynolds (1999: 8-9) have observed that the pattern of electoral system choice to a great extent corresponds to the three 'waves of democratization' as described by Huntington (1991). During the first wave - from 1828 to 1926 multiparty competition and democratic institutional structures began to evolve in the United States, Canada, the United Kingdom, Australia, New Zealand, and across much of continental Europe. Electoral systems emerged gradually, very much in line with the evolution of the democracies themselves. The AngloAmerican societies were relatively homogeneous, based around a single partisan cleavage and a two-party system. The SMP formula was, hence, a natural choice for these countries. A different pattern occurred in Western Europe, which was characterized by plural societies and the lack of a single dominant group. The debate over electoral systems in Scandinavia and continental Europe was concerned with the perceived trade-offs between accountability and representativeness, on the one hand, and geographic representativeness and proportional representation of parties in the legislature, on the other. Consequently, a change from SMP to list PR - often via the TBM formula - took place (Carstairs 1980). Referring to Reilly and Reynolds (1999), Farrell (2001: 177) writes that electoral system choice in the first wave was "characterized by some kind of mix of 'conscious design' and 'accidental evolution"'.

The second wave of democratization - from 1943 to 1962 - was characterized by the re-establishment of some democracies and the process of decolonization. Electoral systems were either inherited from former colonial powers or imposed by outside powers in order to meet a specific purpose. The postwar decolonization resulted in many new independent countries in Africa and Asia, many of which introduced, or continued using, the electoral system of their colonial masters. As mentioned, external imposition of electoral systems occurred in West Germany, Austria, Japan and South Korea (Reilly and Reynolds 1999: 9).

The central feature of the ongoing third wave of democratization, which began with the overthrow of the Salazar dictatorship in Portugal in 1974, has been deliberate electoral system design (1999: 9). An extensive debate on the merits of different electoral systems has been witnessed in several cases of democratic transition, such as Bolivia, South Africa and Fiji, as well as in established democracies like Italy, Japan and New Zealand. Due to the rareness of electoral reform in established democracies, Farrell (2001: 179) regards the growing number of electoral system reforms as a new 'fourth wave' of electoral system choice.

Electoral system choice as an epoch phenomenon is analyzed by means of a variable called temporal diffusion. A particular electoral system may be frequently adopted at a specific point in time and rarely chosen at other times. Accordingly, countries are to a great extent assumed to adopt electoral systems that many other countries have recently chosen. The cognitive heuristics model, which is emphasized in Weyland's (2005) analysis of the causal mechanisms behind diffusion, underlies the wavelike pattern of diffusion: its modest start, sudden rise, and eventual decline. At certain points in time, there is a need for developing new institutions. Usually a particular system is more popular than other systems, and serves as a model for countries in a constitution building process. The constitution is often a child of its time - the single parts of the constitutional framework can be perceived in the same way. However, it is difficult to predict which electoral system as well as other institutions, will be in fashion at a particular point in time.

### 3.2.5 The Institutional Perspective

The third approach maintains that institutional choices are explained by the overall constitutional design. Norris, for instance, emphasizes the importance of the
constitutional structure in setting the context for many aspects of political behiavior (2004: 41). Anckar and Karvonen point out that "constitutional choices may be dependent on each other, the choice of one device following naturally from the choice of another device" (2004: 8). For example, most federal systems are characterized by a bicameral chamber structure (Derbyshire and Derbyshire 1989: 74). Two chambers have even been considered necessary in federal countries (Roskin 1986: 9). Lijphart (1991a: 72-84) maintains that architects of new democratic constitutions are confronted with two fundamental choices, namely those between plurality and PR and between parliamentary and presidential forms of government. By analyzing all four possible combinations, or in his words, the four basic types of democracy (presidential-PR, presidential-plurality, parliamentary-PR, parliamentary-plurality), he concludes that the combination of parliamentarism and PR is the most preferable. It performs better than the other types with respect to, among other things, voter participation, accomodation of ethnic differences, and control of unemployment (1991a: 81-83).

Electoral and governmental institutions interact in a number of ways. Countries with plurality systems often have two-party systems, or at least a low degree of party system fragmentation, which in turn produces one-party governments. Such executives are usually dominant in relation to the legislature. In contrast, PR countries are likely to have multi-party systems, coalition governments, and more balanced relations between executive and legislative power. These two models are known as the majoritarian (or Westminster) model of democracy and the consensus model of democracy (Lijphart 1984; 1991a; 1999). Since the electoral system has consequences with regard to the governmental system, it is reasonable to assume that choice of one device matters to the choice of another device. It should be observed that the causality is reversed in the outline above - the present study deals with electoral system choice as a dependent variable. Nevertheless, we may assume that the existing governmental system influences the outcome of an electoral reform, because the chosen electoral method is likely to affect the strength of the executive.

Furthermore, Lijphart (1991a: 73) points out that a presidential form of government has majoritarian effects on the party system. Presidentialism is likely to create a two-party system, because only the largest parties have realistic chances of winning presidential elections. This advantage tends to carry over into
parliamentary elections, particularly if both elections are held at the same time (see also Shugart 1988; Shugart and Carey 1992). Thus, electoral and governmental institutions interact in shaping the party system. Accordingly, if constitutional engineers are aware of these tendencies, we may expect the choice of one institution to be relevant to the choice of another institution.

Returning to the models of democracy, Lijphart presents a number of characteristics that emphasize either the majoritarian or the consensus government model. The performance of these government forms are systematically analyzed in two excellent volumes, Democracies (1984) and Patterns of Democracy (1999), the latter being an updated and expanded edition of the former. The Westminster model prescribes (1) concentration of executive power in single-party majority cabinets; (2) cabinet control of parliament and a fusion of executive-legislative authority; (3) assymetrical bicameralism and legislative dominance by the lower house (or unicameral legislature); (4) a two-party system; (5) a majoritarian electoral system; (6) interest group pluralism; (7) unitary and centralized government; (8) constitutional flexibility (9) legislatures having the final word on the constitutionality of their own legislation; and (10) central banks that are dependent on the executive (Lijphart 1999). These institutions and devices create a logical entity; an ideal government form called majoritarian democracy. Majoritarian democracy means "government by the majority of the people": majorities should govern and minorities should oppose (1999: 31).

The elements that together make up the consensus model are (1) executive powersharing in broad multi-party coalitions; (2) separation of executive and legislative authority; (3) division of legislative power between two equally strong but differently constituted houses; (4) multi-party system; (5) proportional representation; (6) corporatist interest group system; (7) federal and decentralized government; (8) rigid constitutions that can be changed only by extraordinary majorities; (9) judicial review by supreme or constitutional courts; and (10) independent central banks (1999). In the same way as the elements of the Westminster model, these characteristics belong logically together; representing an alternative model called consensus democracy. Contrasting the majoritarian model, consensus democracy aims at maximizing the ruling majority instead of being satisfied with a bare majority. It emphasizes consensus instead of opposition, inclusion rather than exclusion (1999: 33).

Lijphart concludes: "...the overall performance record of the consensus democracies is clearly superior to that of the majoritarian democracies, the consensus option is the more attractive option for countries designing their first democratic constitution or contemplating democratic reform" (1999: 301-302). The conclusion pertains to both homogeneous countries as well as societies with deep cultural and ethnic cleavages. However, these are ideal regime types and only a few countries closely approximate the Westminster and the consensus model. The United Kingdom, New Zealand (prior to the electoral reform in 1996) and Barbados represent the former, whereas Switzerland and Belgium are prototypes of the latter (Lijphart 1999: 10, 33). Nevertheless, democracies tend to lean towards one or the other government forms.

It should be observed that the concepts of majoritarian and consensus democracy are not relevant to the present study to any greater extent. The purpose is to establish a framework for getting an idea of which institutional devices might correlate with majoritarian alternatively proportional electoral systems. Besides, the discussion on performance of countries with different institutional frameworks is concerned with democracies only, whereas the present study consists of considerably more non-democracies than democracies. ${ }^{22}$ Therefore, the assumed relationships are not theoretically developed. Within the framework of the present study, it is nevertheless of interest to explore how electoral systems are chosen in relation to other institutional choices. It may be repeated that the choice of political institutions is not necessarily unimportant in non-democracies. The matter of choosing appropriate institutions may in fact be very important in countries taking their initial steps towards democratization.

In a volume that deals with institutional dimensions of constitutions, Karvonen (2003) studies origin, occurrence and consequences of the following five institutions: territorial organization, executive power, electoral system, legislative power, and constitutionalism. Broadly speaking, these are traditional topics that political scientists have dealt with as long as political science has existed. All of these, except for constitutionalism, are institutions that most often take one of two forms. A country is organized on either unitary or federal basis, it has either a

[^19]parliamentary or presidential government, the electoral system is either majoritarian or proportional, and the legislature consists of either one or two chambers. Despite the existence of intermediate forms in each instance, they are basically dichotomous phenomena. Constitutionalism, on the other hand, is primarily something of which there is more or less. The concept of constitutionalism is appreciably more difficult to handle than the other more 'visible' institutions. There are certainly comparative data on this subject but they reflect present constitutions, whereas an inclusion of this variable in the study would require data from 1945 onwards. The information needed is only obtained by studying each constitution throughout the relevant period, which is out the scope of my ambition. Therefore, constitutionalism is not included in the analysis.

Three properties of constitutions are, accordingly, dealt with as possible determinants of electoral system choice: form of government, territorial organization and chamber structure. With the exception of Lijphart's assessment of different combinations of government types and electoral methods (1991a), and the analysis of majoritarian and consensus democracy (1984; 1999), no theoretical reasoning concerning relationships between certain electoral systems and other institutional choices have been developed. As a consequence, these institutions are not separately dealt with in the theoretical part of the study. Although the theoretical basis is rather weak, the institutional approach is justified with regard to the interest of analyzing constitution building and the performance of different institutional frameworks.

The assumptions are, on the basis of the theory of majoritarian and consensus democracy, as follows: a parliamentary form government, unitary territorial organization, and unicameral legislature should be related to majoritarian systems in general and plurality systems in particular, whereas presidentialism, federal government, and bicameralism should be associated with proportional systems. Descriptions of form of government, territorial organization and chamber structure are given in section 3.3.3.

### 3.3 Independent Variables

### 3.3.1 The Rational Perspective

In this section, the operationalization of the independent variables is presented. Variables are dealt with in accordance with the perspective to which they belong, beginning with the rational perspective. The choice of an electoral system may be rational in two different ways. On the one hand, the rational approach considers electoral system choice as a consequence of the particular sociopolitical and cultural needs of a society. It emphasizes the importance of electoral system design. Two structural variables are tested: ethnic/cultural diversity and country size. On the other hand, an electoral system choice may also be rational from the political actor's point of view. Each actor prefers a system from which he or she will benefit. Structurally generated problems and actor-related problems are not necessarily opposite to each other. Given the contextual nature of the study, I am only interested in those actor-related determinants that have a structural dimension as well. In the previous section (3.2.3.2), two such variables emerged: party system structure and party system transformation. In spite of the fact that both are features of the party system, there is a substantial difference between the two. The latter is an expression of the democratization process and implies a change from absolute one-party rule to a multi-party system with competitive elections, whereas the former is a measure of the number of parties in the legislature.

### 3.3.1.1 Ethnic and Cultural Diversity

The electoral system is, according to experts on conflict management, one structural technique for mitigating conflict and achieving political stability in developmental countries with deep ethnic and other societal cleavages. There are, however, many different kinds of cleavages. In addition to ethnicity, societies are also composed of people with different language and religion. Moreover, the regional spread of minority groups varies; minorities may be highly concentrated into one region or widely dispersed over the whole country. Furthermore, the extent to which a country is divided varies a lot. Evidently, a classification of cultural diversity cannot take all these aspects into consideration. It is probably an impossible task to identify all different kinds of divided societies, and as a consequence thereof, some generalizations are inevitable. Before presenting the
measure of ethnic and cultural diversity, electoral systems relevant for divided societies are dealt with.

In section 3.2.3.1.1, several elements that determine the appropriateness of a given electoral system in a divided society were presented. Four particular electoral systems, each one derived from a specific school of constitutional engineering, were considered appropriate for such a country, depending on the type of cleavages. These are list PR (based on consociationalism), AV (centripetalism), STV (integrative consensualism), and BV (explicitism). Some generalizations are obviously needed here as well. Theories of conflict management in divided societies are, at least with regard to the role of electoral systems, largely normative in character. They should primarily be seen as device for democratizing countries with deep cleavages. No one expect to find these particular electoral systems, to any great extent, in countries with that specific kind of cleavage structure for which they are suited. The integrative model based on STV, for example, is not practiced anywhere, with the possible exception of Northern Ireland (Reilly and Reynolds 1999: 39)..$^{23}$ In addition, experts on plural societies do not agree on the appropriateness of a given electoral system in culturally diverse countries. For instance, Lijphart regards list PR as superior to all other systems in most cases, whereas Reynolds sees AV as the principal tool for establishing political stability in divided societies.

The treatment of BV for the purpose of mitigating conflict is rather dubious. Its principal value in conflict management is the capacity of establishing fixed ratios of different ethnic groups in the legislature. In most cases, however, BV has not been used for the purpose of providing representation of several political groups. On the contrary, the highly disproportional nature of BV has constituted an obstacle for small parties' access to the legislature. I shall, hence, not consider BV as an advantageous system to culturally diverse countries. List PR, AV and STV are, consequently, regarded as (equally) appropriate electoral systems for segmented societies.

The concept of ethnicity has often been broadened to encompass several characteristics such as language, culture and religion (Anckar, Eriksson and

[^20]Leskinen 2002). Narrowly defined, however, ethnicity is similar to race, thereby constituting a particular type of cleavage on the side of language, religion and other cultural features. The term ethnicity is, nevertheless, more frequently used than language or religion when countries' cultural features are described. In the empirical analysis, I shall use two values of fragmentation - one that measures only ethnic fragmentation and one that observes the cleavage - ethnic, linguistic or religious - that returns the highest level of fragmentation. These variables are called the level of ethnic fragmentation and the level of cultural fragmentation. Another reason for this distinction is that information on ethnic affiliation is in most cases more accurate than information on other cultural characteristics. The sources used determine which differences between cultural groups are relevant; i.e. an ethnic, linguistic or religious group is considered distinct in every case where it is reported as a separate group. Concerning religious fragmentation, the following groups are distinguished: Christians, Muslims, Jews, Buddhists, Hindus, Shintoists and Taoists. In addition, relevant cleavages within these groups are also paid attention to.

In a work by C. Anckar, Mårten Eriksson and Jutta Leskinen (2002), accurate indices of ethnic, linguistic and religious fragmentation in all countries of the world are provided. The index of ethnic fractionalization proposed by Rae and M. Taylor (1970: 24-33) has been used for calculating these measures. However, these indices are based on contemporary statistics and cannot be regarded as representative of the world several decades ago. Obviously, a simpler strategy is needed in order to get a comparable measure of fragmentation, considering that information on ethnic and cultural affiliation in older handbooks are often rather meager. Four categories of fragmentation applies: low, bipolar, medium-sized and high level of ethnic and cultural fragmentation. The level of fragmentation is considered high when the largest group represents less than 50 per cent of the population. If at least 80 per cent of the people belong to the same group, the level of fragmentation is low. Accordingly, medium-sized level of fragmentation prevails when the largest group is represented by $50-79.9$ per cent of the population.

So far, attention to constellations between minority groups has not been paid. Consider, for instance, that the largest group is represented by 60 per cent of the population. According to the aforesaid, the level of fragmentation is, then, of
medium size. The other 40 per cent may constitute a single group but it may also consist of several small groups of $5-10$ per cent each, which is a completely different situation. Therefore, the category of bipolar fragmentation is introduced. Two criteria apply. First, the level of fragmentation is considered bipolar if the two largest groups together constitute at least 90 per cent of the population. Second, the largest group must not exceed 70 per cent of the population. Of course, the extreme constellation of 70-20 per cent between the two largest groups cannot be regarded as very bipolar, but some generalizations are inevitable when an appropriate classification is carried out. One could, furthermore, argue that a country in which one fifth of the population belongs to minorities is not low-fragmented, and that a limit of 90 per cent would be more appropriate as for the category with low level of fragmentation. Considering the actual level of fragmentation in countries of the world, the number of countries in which at least 90 per cent of the population belong to one cultural group is rather small, especially when all cleavages are taken into consideration. In this respect, the 80 per cent limit seems reasonable. The categories are as follows:

Low level of fragmentation: largest group $>79.9$ per cent
Bipolar fragmentation: two largest groups $>89.9$ per cent, largest group $<70.1$ per cent
Medium-sized level of fragmentation: largest group between 50 per cent and 79.9 per cent High level of fragmentation: largest group $<50$ per cent, two largest groups $<90$ per cent

As mentioned, the index of ethnic fragmentation regards ethnicity only, whereas the index of cultural fragmentation considers all three cleavages equally important. The index runs from 0 to 3 , the former representing a low level of fragmentation. For example, a country in which the largest ethnic and linguistic group constitutes 95 per cent and the largest religious group 45 per cent of the population scores 0 and 3 on the index of ethnic and cultural fragmentation respectively. For countries with medium-sized and high level of fragmentation, proportional systems and AV are considered more appropriate than other systems. Similarly, majoritarian (except for AV) and mixed systems are better suited for countries with bipolar or low level of fragmentation.

According to the categorization, medium-sized level of fragmentation denotes higher fractionalization than bipolar fragmentation. Calculated by Rae's and Taylor's index, however, several constellations of medium-sized fragmentation
score lower than bipolar ones. Consider two countries, A and B, with ethnic affiliation (\%) as follows: 45-45-5-5 and 70-15-10-5. According to my categorization, country A is bipolar, whereas country B is characterized by medium-sized fragmentation. Rae's and Taylor's index, however, denotes that the level of fragmentation is higher in country A ( 0.59 compared to 0.475 ). Notwithstanding, a majoritarian system is more appropriate in country A with two large ethnic groups than in country B , in which a majoritarian system would disfavor the three small groups at the expense of the large one. Therefore, bipolar fragmentation is considered lower than medium-sized level of fragmentation. Patterns are analyzed by means of chi-square tests.

### 3.3.1.2 Population Size

Both population and area characterizes the size of a country, and they furthermore correlate to a great extent with each other. ${ }^{24}$ There is, in other words, a high degree of multicollinearity between these two, which implies that only one of them should be used in the empirical analysis. All theoretical assumptions presented in section 3.2.3.1.2, except for that of Blais and Massicotte (1997), are based on population instead of territory size. Besides, Blais and Massicotte's finding on causality between territory size and electoral system choice is concerned with district magnitude rather than electoral systems. Consequently, I prefer population to area as an indicator of size.

When examining the effect of size on political phenomena, some measures need to be taken. Whether the independent variable is assumed to have a strong or weak effect on the dependent variable depends on the relative increase of the former. For example, an increase of 100000 citizens from 100000 to 200000 is expected to have considerably stronger effects compared with an equally large increase from 2 000000 to 2100000 . In order to deal with this matter of non-linearity between size and the dependent variable, population size is analyzed in logarithmic (lg10) form.

Some contradictory assertions have been presented concerning the effect of size on electoral system choice. In order to shed more light on the relationship between

[^21]size and electoral systems, two strategies are applied: a continuous treatment of country size and a classification based on threshold values. The purpose of the first mentioned is to find out whether large countries tend to use proportional or majoritarian systems to a greater extent than small ones. This variable is measured on an interval scale. The purpose of the second approach is to examine whether there are some threshold values concerning the impact of country size on electoral system choice. The categorization is made by means of the logarithmic values. By treating each integer as one category, six categories are created, which may be considered as an appropriate number. The continuous variable is the subject to correlation analysis, based on the broad typology of electoral system choice.

### 3.3.1.3 Party System Structure

Contrary to the literature that emphasizes the influences of institutional structures on party systems, the sociological approach maintains that electoral systems are shaped by party systems, which, in turn, originate from the societal cleavages. Several classifications of party systems have been presented. The traditional approach is to classify according to the number of parties. Duverger (1964) applied three categories: one-, two- and multi-party systems. According to this classification, countries with one- or two-party systems are assumed to choose plurality systems, whereas proportional systems are most likely found in multiparty systems. There are, however, party systems that correspond to neither the traditional two-party system nor a multi-party system. Canada's party system, for instance, is often referred to as a two-and-a-half-party system. In India until 1996, there were one major party and several smaller ones. There are, moreover, different kinds of multi-party systems; some countries have three or four main parties, whereas the party system in other countries may be even more fragmented. Jean Blondel's (1969: 138-176) classification identified several categories than that of Duverger. He distinguished initially between 'systems without parties', 'one-party systems', and 'systems with more than one party'. The third category was thereafter divided into four subtypes: 'two-party systems', 'two-and-a-half-party systems', 'multi-party systems with a dominant party', and 'multi-party systems without a dominant party'.

For a long time, this kind of numerical classification was almost universally prevailing. Nowadays, the common way of classifying party systems is to pay
attention not only to the number of parties but also to their relative strength, i.e. the vote (or seat) shares for each party. In 1967, Rae constructed an index of party system fractionalization, ranging from 0 to 1 . Low values indicate a low degree of party system fragmentation and vice versa. Rae's index has later on been modified. Perhaps the most widely used measure of party system fragmentation is 'the effective number of parties', created by Markku Laakso and Taagepera (1979). The effective number of parties is calculated according to the following formula:

```
    1
N = -------
    \sumvi}\mp@subsup{}{}{2}\quad\mathrm{ where vi refers to the vote share of the it party.
```

The smallest possible value is 1 . No upper limit exists. The effective number of parties can be calculated on the basis of either vote shares or seat shares. In this case, vote shares are more appropriate. If the party system is assumed to affect the choice of electoral system, the electoral support reflected in the vote share of each party is the crucial factor. If the effective number of parties is calculated on the basis of seat shares, each value is influenced by the electoral system used in the previous elections, because the electoral rules determine the allocation of seats. In the theoretical survey of party systems and electoral systems, it was argued that both variables affect each other. A fragmented party system might be the consequence of a proportional electoral system as well as the initial reason for choosing that kind of system. The application of vote shares rather than seat shares decreases the influence of the former electoral system on the party system structure to a considerable extent. Notwithstanding, the allocation of vote shares is not totally independent of the electoral system, because the electoral system also has a psychological effect, in addition to a mechanical effect, on the party system structure. ${ }^{25}$

To use the effective number of parties as a measure of party system structure implies that I must exclusively focus on cases of electoral system change. Even if a robust measure of party system fragmentation would be applied, the estimation of the number of parties before the choice of electoral system and the first elections would be rather vague. By regarding the effective number of parties in countries

[^22]that have previously held general elections under a different electoral system, an exact measure of party system constellations at the time of choosing an electoral system is received. Electoral system changes of interest, in accordance with the theoretical arguments, are those from plurality to PR and from PR to plurality systems. One could think of comparing countries that introduce proportional systems with countries that adopt plurality systems, and expect a high degree of party system fragmentation in the first group and vice versa. However, the effect of the previous electoral system on the party system implies that the assumed pattern is not likely to emerge. Therefore, another strategy is chosen.

Countries that have changed from plurality to proportional electoral rules are compared with countries that have retained their plurality system during subsequent elections. Likewise, the level of party system fragmentation among countries that have replaced PR with plurality are compared with the level of party system fragmentation among PR systems in general. The degree of party system fragmentation is assumed to be higher in countries that have replaced plurality with PR than in countries that have retained plurality elections, and vice versa.

According to the theory of electoral systems and party systems, the defractionalized party system in plurality systems is partly a consequence of the disproportional seat allocation between parties, which, in turn, is caused by the use of single-member districts. However, a high degree of disproportionality is also associated with majority systems for the same reason. This raises the question of whether majority systems should be added to the category of plurality systems. Disproportional effects notwithstanding, majority systems tend to produce more fragmented party systems than plurality systems. ${ }^{26}$ In his frequently quoted work Political Parties, Duverger concluded that "the simple-majority system with second ballot and proportional representation favour multi-partism" (1969: 239). In the following sentence, however, he pointed out that the effect of the first mentioned, i.e. the two-ballot majority formula in my terminology, is more difficult to define. As a matter of fact, the influence of TBM has been widely questioned. Rae's findings, for instance, suggest that TBM has a defractionalizing effect on the party system (1967: 109). Moreover, the other basic majority system, the alternative vote, is not the subject to this reasoning.

[^23]There are, nonetheless, a number of studies that indicate that the effective number of parties is higher among majority systems than among plurality systems. In Lijphart's study of party systems and electoral systems (1994b), plurality systems have an average value of 2.04, whereas the average value among majority systems is 2.77 (1994b: 96). When the four elections under AV and six elections under TBM in C. Anckar's study of effects of electoral systems are combined into a single index, the level of party system fragmentation is 2.79 , compared to 2.14 in plurality systems (2002: 77). In the earlier presented study of PR reforms by Blais, Dobrzynska and Indridason (2005), the more fragmented party system among majority systems, in comparison with plurality systems, is seen as a main reason for the adoption of PR.

The criterion for inclusion in the comparison groups is that the same electoral system has been applied in at least three subsequent legislative elections. By using the same electoral system in several subsequent elections, the party system becomes more stable and less vulnerable to other influences than the electoral system. The aforesaid does not, however, under any circumstances mean that the electoral system would be the only determinant of a stable party system. Party system fragmentation in the countries of the world at the end of 2003, or following the last available election results, is observed. Unfortunately, the criterion of three subsequent elections cannot be applied in the samples of electoral system change, because the number of cases would be too small. In order to get a higher level of party system stability, two elections prior to each electoral system change are included. Notwithstanding, the number of electoral system changes is small, especially changes from PR to plurality systems, and changes among democracies in general. ${ }^{27}$ Therefore, another enlarged sample of electoral system changes that includes changes from plurality to PR and mixed systems, which independently combine plurality elections with PR , is compared to plurality systems. Concerning changes from PR, likewise, a comparison between PR systems and electoral system changes from PR to plurality and mixed systems (independent combination of plurality and PR ) is conducted.

[^24]The association between party system fragmentation and electoral system choice is analyzed in the total data sample as well as in democracies. Usually, however, this matter is studied in democracies only, because the range of choice is limited in non-democracies, which affects the party system structure. Consequently, greater importance is attached to the results from the democratic sample. Concerning electoral system change, the criterion for inclusion in the democratic sample is that the last two elections prior to the electoral reform have been conducted under democratic circumstances. If the second last elections before the electoral system change have not been democratic, they are excluded from the analysis. Mean value analyses are conducted.

### 3.3.1.4 Party System Transformation

Before the shift from majoritarian elections to proportional representation, Western European countries already had multi-party systems in the sense of competition between two or several parties. This dimension is, notwithstanding, relevant with regard to the democratization process and its influence on electoral system choice. In terms of legal proceedings, no transformation of the party system took place in continental Europe a century ago. Indirectly, however, the extension of suffrage led to a more fragmented party system by facilitating the organization of lowerclass parties.

In this study, I shall focus on party system transformation implying a change from one-party system to multi-party system. This dimension is a cornerstone of the democratization process, albeit it by no means guarantee the realization of democratic politics. In several one-party states, elections have been held despite the fact that no competition has been allowed. These elections have, with a few exceptions, been held under a majoritarian system, since there is no need for proportional seat allocation in a party system with only one party. ${ }^{28}$ Countries that have lifted their ban on political parties (other than the ruling organization) are, according to this hypothesis, expected to adopt mixed or proportional systems.

The units of analysis are all cases of transformation from a one-party to a multiparty system between 1945 and 2003. Cases where the multi-party system is

[^25]preceded by military rule or other kinds of dictatorship without elections are also included, provided that elections have previously been held and the former electoral system is majoritarian. A prerequisite is, however, that the former ruling organization is still present at the political arena when the party system is transformed. Some former Soviet states are also included, although the transformation of the party system took place shortly before independence was proclaimed. The introduction of multi-party systems in these countries was, notwithstanding, part of the independence process, and they are, furthermore, important cases of bargaining between the old elite and the new contestants. The prerequisite of former elections under the majoritarian rule is fulfilled, because pre-independence elections were held in all these countries. Systems characterized by some degree of competition between factions within the sole party are regarded as one-party systems.

The introduction of multi-party politics is assumed to influence the choice of electoral system. In some cases, however, the distance between the independent and the dependent variable may be diminutive, since both the transformation and the electoral reform are regarded as part of the democratization process. Both reforms may actually be introduced simultaneously as part of a new constitution. Notwithstanding, I argue that the choice of electoral system is a consequence of the fundamental changes in the party system structure. The electoral system is a means of dealing with a new environment consisting of several political parties. From a democratic point of view, the introduction of competitive elections takes precedence over the choice of electoral provisions - the former is more important than the latter. In addition, from a logical point of view, the regime hardly decides on the adoption of a proportional system before it decides to lift the ban on political parties. Even if that were the case, the decision on the electoral system would still be taken with the forthcoming, often unavoidable, situation of several competitors in mind.

Party system transformation is closely related to the variable that measures the level of party system fragmentation. A crucial difference is that party system fragmentation is concerned with countries that have previously held competitive or at least semi-competitive elections, whereas the transformation variable pays attention to countries that introduce multi-party politics. In addition, party system transformation is, as mentioned earlier, particularly concerned with the
democratization process. Nevertheless, both assume that the party system influences the choice of electoral system.

### 3.3.2 Culture and History: Patterns of Diffusion

Rather than representing outcomes of rational calculations, the second approach of my frame of reference regards electoral systems as reflections of the cultural and historical contexts of which they are part. Three variables will be tested within this perspective: colonial diffusion, regional diffusion and temporal diffusion.

### 3.3.2.1 Colonial Diffusion

If colonial background is decisive in explaining the choice of electoral systems, former colonies are expected to adopt the electoral system that the colonial power applied when independence was received, or the electoral system that the colonial power established in the colonies. Electoral reform in the former colonial power later on is not assumed to influence its former colonies. Birch, Millard, Popescu and Williams (2002) maintain that the influence of colonial powers is probably less significant if the decolonization has taken place long before electoral institutions were adopted. During the second half of the twentieth century, however, electoral provisions were enacted almost immediately after independence was achieved. In several colonies, representative institutions, and consequently electoral laws, already existed before the declaration of independence. Those countries that did not adopt electoral provisions before or directly after independence are, with a few exceptions, those who never have adopted representative institutions, such as Qatar and the United Arab Emirates. As a matter of precaution, I shall introduce a time limit of ten years, within which the influence of colonial powers on former colonies is considered relevant. In colonies where several colonial powers have been present, only the electoral system of the last one is regarded as inheritable. In cases of shared colonial rule, both colonial powers are considered as potential sources of legacy.

Concerning colonial heritage and electoral system choice, the first choice of electoral system in a country is considered more important than later amendments of electoral rules. Electoral system changes can certainly be influenced by the former colonial power but a later choice of a similar electoral system might just as
well be independent of foreign influences. Therefore, only first choices of electoral systems are regarded.

As to the classification of electoral systems, a distinction between plurality, majority, proportional and mixed systems is obviously too broad in this respect. If the colonial power applies AV and its former colony adopts TBM, the choice cannot be regarded a colonial legacy. Similarly, list PR and STV are not considered as equivalent systems despite the fact that they both are proportional systems. Former British colonies are expected to apply SMP. Plurality elections in multi-member districts (BV) are usually regarded as a British colonial legacy as well. I follow the same practice. Concerning former French colonies, different patterns are expected, depending on when the colony received independence. France used three different electoral systems during the decolonization era: list PR until 1946, mixed-coexistence in the 1951 and 1956 parliamentary elections, and TBM as of 1958. Electoral reforms were implemented in May 1951 and October 1958. In addition, BV is regarded as a colonial legacy, because the French introduced plurality elections with party lists in several territories before independence was granted (Diamond and Lipset 1995: 266). It might appear controversial to regard both SMP and BV in former British colonies as a legacy of British colonization, but only the block vote version of plurality systems as a French colonial legacy. However, the crucial point is that France has never used the pure SMP formula, which implies that SMP cannot be considered a legacy of French colonial rule. The same logic applies to former colonies that use a mixture of single- and multi-member districts: the SMP-BV formula may be inherited from the United Kingdom but not from France.

Portugal used nationwide list PR for the first time in April 1975 (Flora et al 2000: 783-784). The Portuguese colonies in Africa received independence the same year, except for Guinea-Bissau which declared independence in 1973, and was recognized by Portugal the following year. However, no former Portuguese colony in Africa enacted any electoral law before the adoption of PR in Portugal (Nohlen et al 1999). The occurrence of list PR is consequently regarded as a colonial legacy from Portugal. The only country that has been a Spanish colony during the postwar period, Equatorial Guinea, became independent in 1968. No electoral law existed in Spain between 1936 and 1977, which implies that Equatorial Guinea could not have inherited its electoral system from Spain.

The occurrence of list PR in former Belgian colonies is considered a legacy of Belgian colonial rule. List PR is also associated with South African, Italian, Dutch and Indonesian colonial rule. The United States and New Zealand are assumed to have transferred SMP to their former colonies. If Australian colonial rule matters to electoral system choice, AV should be applied in its former territories. Soviet Union and Yugoslavia are also regarded as colonial powers although their territories did not have colonial status. Nevertheless, the electoral system in the independent countries that emerged from the breakdown of the Soviet Union and Yugoslavia may be considered a legacy or not a legacy from pre-independence times. TBM may have been transferred from the Soviet Union. SMP, mixedsuperposition and list PR are regarded as heritage from Yugoslavia, depending on when the relevant countries have declared independence and adopted electoral systems. ${ }^{29}$

Despite the rather detailed classification of electoral systems described above, a simplification is needed in order to make correlation analysis possible. After presenting the frequency of electoral system choice as a consequence of colonial diffusion, bivariate analysis is conducted. The correlation between British, French and Soviet legacy, on the one hand, and electoral system choice, on the other, is presented separately for each colonial power. A dummy variable that embraces all former colonies is also included. The analysis is based on the broad category of four electoral systems.

### 3.3.2.2 Regional Diffusion

Regional diffusion of electoral systems implies that the choice of an electoral system is a consequence of influence of other countries within the same region. Some further criteria are also needed. First of all, a sufficient amount of similarity is required between the influencing and the imitating country with regard to the phenomenon that is assumed to be the subject to diffusion. In practice, the imitating country must adopt the same electoral system as the imitated country applies. Similarities with regard to the electoral formula are also required. There are, however, a few exceptions to this rule. No distinction between SMP, BV and

[^26]SMP-BV is made; i.e. the adoption of BV may be considered a transfer from a country that uses SMP and vice versa. The same applies to TBM and OBM. The various mixed electoral systems combine the majoritarian and the proportional rule in different ways, each one of them thereby constituting a 'system' of its own. In order to establish a process of diffusion between two countries with mixed electoral systems, the combination of plurality/majority and PR must not vary much between the two. Each case needs to be pondered over carefully.

Furthermore, we need an apparatus for proving that a process of regional diffusion has taken place. Similarity between two objects may come into existence in four different ways. First, it may be a consequence of diffusion from A to B. Second, it may be a process of diffusion from a third part to both A and B. Third, the similarity may have been developed independently in both contexts. Fourth, it may have come into existence randomly (Karvonen 1981: 81-82). Only the former two are cases of diffusion.

In the following, three criteria for determining whether similarities are a consequence of regional diffusion are stipulated. There are basically two dimensions of diffusion: spatial and hierarchical diffusion. First, a 'transfer' of an electoral system from one country to another must occur within the same subregion in order to qualify as a process of regional diffusion. This is the spatial dimension. I shall return to a definition of region and sub-region later on. Second, a 'transfer' of an electoral system from country A to country B does not qualify as a process of diffusion if country $B$ is politically, economically and military more powerful than country $A$. This criterion is concerned with the hierarchical dimension of diffusion. Countries do not tend to imitate countries lower down the hierarchy of power. Country size also matters in this connection. For instance, the introduction of mixed-superposition in Russia does not qualify as a process of diffusion from Georgia, since Russia is superior to Georgia in every respect mentioned above. Nevertheless, it is often difficult to assess whether country A is more powerful than country B. Country A might be small but economically well off, while country B might be the largest one in the sub-region but relatively poor. As a rule of thumb, I shall consider some kind of equilibrium between the countries in question as a satisfying criterion.

Third, an electoral system must exist in country A before country B adopts the same electoral system. If country B chooses its electoral system before country A, the electoral system choice in country B is not a consequence of diffusion. For instance, the adoption of mixed-superposition in Georgia in 1992 was not a result of diffusion from Russia, because Russia did not adopt the same electoral system until 1993. To introduce cultural similarities as a necessary criterion does not seem appropriate. Diffusion and imitation are certainly concerned with culture but the history provides us with examples of diffusion between culturally different societies as well - the transfer of the presidential system from the United States to South America is a case in point. However, the three criteria presented above may be regarded as necessary for a process of regional diffusion to prevail. The regional division described below comprises the cultural dimension of imitation. Countries within a given sub-region often share similar cultural features. Since imitation of former colonial powers is separated from imitating other influential or culturally similar countries, an electoral system choice that is regarded as a colonial legacy does not qualify as a case of regional diffusion.

Concerning the regional criterion, countries are classified according to the following continents: America, Europe, Africa, Asia and the South Pacific. However, regional influence may also occur in certain parts of a continent. The categorization above is hence too broad, and might overlook some tendencies of imitation in certain smaller regions. A common categorization of sub-regions is applied. South America is divided into Central America (including Mexico), the Caribbean, and South America. Europe is split up in two: Western and Eastern Europe. Five distinct African regions are identified: North, West, Central, East and Southern Africa. Concerning Asia, the categorization in Elections in Asia and the Pacific: A Data Handbook (Nohlen et al 2001) is applied: Middle East, Caucasus and Central Asia, South Asia, Southern East Asia, and East Asia. Russia (and the Soviet Union) is regarded as part of Eastern Europe as well as Caucasus and Central Asia. Concerning the dividing line between sub-regions, a specification is needed. If an influential country is situated on the fringe of a sub-region, its electoral system may naturally be imitated by neighboring countries in the adjacent sub-region. These cases are also regarded as cases of regional diffusion if all criteria above are fulfilled. Similarly, the spatial and the hierarchical criteria must
be weighed together. On the whole, each individual case needs to be pondered over carefully.

One may argue that some regions, e.g. Western Europe, are very large, and rather diverse in terms of culture. There are, indeed, differences between e.g. Scandinavian and Southern European political culture, but one cannot deny that there is a distinct Western political culture different to political culture in other parts of the world. Similar features certainly exist in other regions, especially in developed countries, but this categorization is based on geographical location, which explains why Western Europe is seen as one single sub-region. In the present study, the classification based on sub-regions includes the concept of diffusion in terms of cultural influence. An accurate classification of which countries have, in a cultural sense, influenced other countries would require case studies of all countries of the world, which is out of the scope of the dissertation.

To sum up, the criteria of regional diffusion are: (1) transferring of an electoral system within the same sub-region, (2) superiority of the imitated country, or at least a state of equilibrium in relation to the imitating country in political, economical or military respects, and (3) occurrence of the electoral system in the imitated country before occurrence of the same electoral system in the imitating country. In addition, similarities in electoral rules must prevail. Cases that are coded as colonial diffusion are not coded as cases of regional diffusion. This decision is taken in order to avoid over-determination of patterns of diffusion. In addition to a descriptive survey of processes of diffusion by continent, correlation analysis between diffusion and electoral system choice (the broad typology) is provided, regional diffusion being a dummy variable.

### 3.3.2.3 Temporal Diffusion

In addition to colonial legacy and regional influence, the cultural and historical impact is expressed by patterns with regard to the timing of electoral system choice. Reilly and Reynolds have observed similarities between the three waves of democratization and patterns of electoral system choice (1999: 8-9). In each wave, electoral systems were, at large, adopted in a distinct way. In other words, we may speak of temporal diffusion of electoral system choice.

Three matters are of interest in connection to this variable. First, the moment of each electoral system choice is observed. Are there periods during which few countries have adopted electoral systems, and other periods during which electoral system choice has been frequent? Of course, this matter is largely related to timing of independence - countries usually adopt electoral as well as other institutions when they obtain the power of self-determination. However, by separating all cases of electoral system change from first choices of electoral systems, some interesting patterns may emerge. On the whole, a presentation of the timing of all choices of electoral systems during the relevant time period is of basic interest concerning the topic of the dissertation.

Second, I shall examine whether particular periods are associated with the adoption of particular electoral systems. Which electoral systems have been the most popular at which point in time? Are some electoral systems particularly attached to some given periods? The third matter to be dealt with is to examine whether some of the other explanatory factors are valid during certain eras of electoral system choice, and less important during other periods. Which are the main determinants during different epochs? This will certainly be an excursion from the general logic of the study, but I nevertheless find it appropriate given the modest level of dignity of temporal diffusion as a general determinant of choosing political institutions.

This variable is rather similar to the concept of colonial and regional diffusion; countries are expected to imitate recent institutional choices of other countries. There are, however, three differences between temporal diffusion on the one hand and other types of diffusion on the other. First, according to the definition of regional diffusion in the last section, a process of diffusion may occur within the same sub-region only. Timing of electoral system choice is not concerned with the spatial dimension of politics. Second, in contrast to colonial and regional diffusion, temporal diffusion deals exclusively with timing. Third, temporal diffusion is partly analyzed in relation to other explanatory variables.

If a country has adopted its electoral system before independence, the coded year of electoral system choice is the same as the year of independence. As for countries without pre-independence electoral institutions, the relevant electoral laws determine the coded year of electoral system choice. If information on the date of the electoral law is lacking, the year of the first parliamentary elections under the
new electoral system is decisive. A discussion on this matter is provided in section 4.2. The initial survey of temporal diffusion results in a number of periods that constitute the basis for chi-square analysis.

### 3.3.3 The Institutional Perspective

The institutional perspective maintains that institutional characteristics are related to other characteristics of the constitutional framework. Some institutional arrangements follow logically upon others and together they constitute a uniform constitutional machinery, a coherent whole. Hence, the cornerstones of a constitution often appear side by side. Three institutional variables are examined within this approach: (1) form of government, (2) territorial organization, and (3) chamber structure. The approach is explorative in character due to the lack of developed theoretical reasoning concerning the influence of political institutions on electoral system choice. Besides, the distance between independent variables and the dependent variable may be diminutive. If institutions are cornerstones that logically belong together, we may expect two or more institutions to be adopted approximately at the same time, each variable then becoming both explanatory and explained. In this context, however, electoral system is a dependent variable, because the choice of a particular system is regarded as dependent on the presence or introduction of certain other institutions.

### 3.3.3.1 Form of Government

Lijphart (1992b: 1) asserts that the relationship between the executive and the legislature is probably the most important institutional difference among democracies. Presidentialism and parliamentarism are the two dominant forms of democratic governmental systems. Presidentialism is characterized by separation of powers, whereas parliamentarism represents a fusion between executive and legislative power. In presidential regimes, the head of the government - most often called president - is elected for a fixed, constitutionally prescribed term and cannot normally be dismissed by a parliamentary vote of no confidence. In parliamentary regimes, the head of the government - usually called prime minister but also premier, chancellor, minister-president, among others - and his or her cabinet are dependent on the confidence of the legislature and may be forced to resign from office by a legislative vote of no confidence. A second crucial distinction,
according to Lijphart's definitions (1992b: 2-3), is that presidential heads of government are popularly elected and parliamentary heads of government are selected, in a variety of different ways, by the legislature. The third fundamental difference is that parliamentary regimes have collective or collegial executives, whereas presidential regimes have one-person, non-collegial executives. In contrast to a relatively high degree of collegiality in parliamentary decisionmaking, the members of presidential cabinets are mere advisers and subordinates of the president. Although some scholars argue that these are not sufficient criteria of presidentialism and parliamentarism, most authors agree that these three criteria are fundamental dimensions of the basic regime types (e.g. Sartori 1994: 83-84; Shugart and Carey 1992: 19; Verney 1959).

A number of countries combine features of presidentialism and parliamentarism, thereby constituting hybrid, usually called semi-presidential forms of government. According to Sartori (1994: 131-132), a governmental system is semi-presidential if the following characteristics apply. First, the president is elected directly or indirectly by popular vote for a fixed term of office. Second, the president shares the executive power with a prime minister. Third, the president works independently of the legislature but his not entitled to govern alone. Fourth, the prime minister and his cabinet are subjected to parliamentary confidence. Fifth, the dual authority structure allows for different balances and shifting prevalences of power within the executive. C. Anckar prefers a minimal definition, prescribing that "there is a dual authority structure" and that "executive powers are shared by a president (...) and a prime minister, who is responsible to parliament" (2003: 4). Shugart and John M. Carey (1992: 23-25) have suggested a separation of semipresidential systems into two categories, premier-presidentialism and presidentparliamentarism, depending on the power balance between the prime minister and the president. Sartori (1994: 133) rejects this proposal since the premierpresidential category is very wide, leaving the president-parliamentary category with only a few, rather dubious cases. My classification of semi-presidential regimes builds upon the definition by Sartori.

These are the democratic forms of government. Authoritarian regimes cannot be classified according to this categorization. The parliamentary, semi-presidential and presidential models cannot work properly if basic democratic elements are lacking. In the Derbyshire (1999: 46) handbooks, one-party regimes are subdivided
into Communist, nationalistic socialist, authoritarian nationalist and military authoritarian. The authors write that the most common form of executive among these countries is presidential. States with individual executives exercising virtually unbridled power are classified as absolutist regimes. I shall not pay attention to these kinds of regimes. The study certainly consists of nondemocracies as well but it is of no scientific interest to examine how military and other authoritarian regimes combine governmental and electoral institutions. If elections are held, they probably use the majoritarian rule. What matters is the distinction between the three primary forms of democratic government and to what extent electoral system choice is dependent on them. Consequently, only democratic countries are included in the analysis.

There are, furthermore, some other forms of democratic governmental systems that cannot be classified according to the three-grade scheme above. The sevenmember Swiss Federal Council, for example, is elected by the legislature for a fixed four-year term and cannot be dismissed by a vote of no confidence. A president, chosen by the legislature, leads the government. The term of office is one year and the president lacks significant powers. In Albania, Botswana, Estonia and Sri Lanka, the president is elected by parliament. In Kiribati, Lithuania, Namibia, Botswana and Sri Lanka, the president is not independent of the legislature, because he may be dismissed by a parliamentary vote of no confidence (Karvonen 2003: 59-60). These countries are, as a consequence, excluded from the analysis.

Parliamentarism and majoritarian elections are fundamental elements of majoritarian democracy, whereas presidentialism and a proportional electoral system belong to the consensus model (Lijphart 1984; 1999). However, Lijphart (1991a) maintains that the combination of parliamentary government and PR performs better than the other three combinations of executive and electoral provisions. Nonetheless, empirical findings are expected to resemble the patterns of Westminster and consensus democracy, notably since the empirical analysis consists of democracies only. Bivariate relationships are studied by means of chisquare analysis.

### 3.3.3.2 Territorial Organization

A nation-state is one that claims sovereignty over the whole of its territory. This means that everyone within its boundaries is subject to its laws. Even if the state authority is sovereign within its boundaries, the territorial organization of the state varies between countries. In most countries, the central state authority exercises primarily unlimited power over the whole territory. In a number of countries, however, significant parts of the state authority are located at the regional level, where representatives and authorities within each region respectively have autonomous decision-making and executive power. This kind of territorial organization is called federalism, whereas the former is called unitarism. The fact that a state is unitary does not necessary mean that it is highly centralized. In the Scandinavian countries, for example, the political power is rather decentralized because of a high degree of municipal autonomy. However, this is not a federal arrangement since the central state authorities have unilaterally decided to transfer power to the municipals. Neither is a country federal if one or a few regions are self-governing, whereas all other regions are subordinate to the state authorities (Karvonen 2003: 22-23).

Several definitions of federalism have been presented. This is largely due to the varying degree of federal arrangements in the world. Authors that regard the American federal organization as the prototype of federalism usually list a lot of necessary defining characteristics of federalism. In The Encyclopedia of Democracy, federalism is defined as "a form of political association and organization that unites separate polities within a more comprehensive political system, allowing each polity to maintain its own fundamental political integrity" (Elazar 1995: 474). The definition is supported by six fundamental principles of federalism. Federal systems are (1) non-centralized, (2) they are strongly predisposed toward democracy, (3) they rest on a system of checks and balances, (4) they operate through a process of open bargaining among institutions and their representatives, (5) they have a written constitution, and (6) they have constitutionally demarcated the fixed units of power within the polity (Elazar 1995: 476-478). However, this kind of definitions runs the risk of mixing a phenomenon with its preresquities and/or consequences. To require that democracy is a necessary characteristic of federalism is to assert that constitutional provisions only matter if democracy works. Similarly, a written constitution may be a consequence
of the federal structure rather than a defining feature of federalism (Karvonen 2003: 24-25).

Karvonen (2003: 25) maintains that definitions must be strict and analytical instead of detailed and empirical. He emphasizes the following three defining characteristics of federalism as the most important:

1) The main part of the territory is divided into self-governing regions. Regional autonomy is the basic principle of territorial organization. Only small deviations from this principle may occur.
2) Political power is divided between the central and the regional level. Both must have autonomous decision-making power over some important political matters. Concerning these matters, the central and the regional level must not be subordinate to any other possible administration level.
3) Equality between the central and the regional level must prevail. The distribution of power must not be altered against the will of the self-governing regions.

In other words, this definition prescribes the contemporaneous occurrence of federal territorial organization, distribution of power between the central and regional level, and guarantees for the continuance of the federation. Countries that do not meet any of these criteria are called unitary states. In addition to federal and unitary states, however, there are countries that retain a unitary nature but still have for a variety of regional and political reasons decentralized features. In some countries, the regional autonomy is significant but concerns only part of the territory. In other countries, there is a regional division in the whole territory but the regional autonomy is rather weak. Denmark, for instance, is a unitary country with federal features, Faroe Islands and Greenland being separately administrated. France with several elected regional councils and Italy with 20 regions are examples of countries with regional autonomy not strong enough to be classified as federations. In Political Systems of the World, 36 countries belong to the mixed category (Derbyshire and Derbyshire 1999: 23). Concerning the relationship between territorial organization and electoral systems, however, the distinction between strictly unitary states and unitary states with federal features is not relevant. Since an electoral system is applied in the whole territory, the classification of territorial organization must also be based on principles that apply
to the whole territory. Countries are, consequently, classified as either federal or unitary states.

Deriving from the theory of majoritarian and consensus democracy (Lijphart 1984; 1999), I assume that federalism is related to PR elections, and that unitary arrangements are associated with plurality and majority systems. The relationship between territorial organization and electoral system choice is analyzed by means of chi-square tests.

### 3.3.3.3 Chamber Structure

This section is concerned with the organization of the legislative power. In most countries, the representative assembly is organized in one single chamber. These countries are called unicameral. In some countries, however, two parallel assemblies exercise legislative power - this phenomenon is called bicameralism. Several different names of the two chambers among bicameral countries are used. In the Netherlands, for example, the politically more important and directly elected part of the legislature is called the second chamber (Tweede Kamer), whereas the first chamber (Eerste Kamer) is elected by members of the provincial councils and is less powerful. Normally, however, the opposite terminology is used: the 'additional' chamber beside the directly elected and politically more important legislative body is called the second chamber. In most North and South American countries, this chamber is called the Senate. Other names are the House of Councillors in Japan, Council of States in India, and Bundesrat in Germany and Austria. House of Representatives, National Assembly and Chamber of Deputies are common names of the first chamber. In the United Kingdom, the chambers are called House of Lords and House of Commons. In the Derbyshire volumes, the terms upper house and lower house are frequently used (1999: 69-74).

Karvonen (2003: 121) suggests the following definition of bicameralism: a country's legislative assembly is bicameral if it is organized as two separate chambers. This definition is clarified by an examination of two borderline cases: Norway and the Federated States of Micronesia. In Norway, Stortinget is elected as one single representative assembly, but after the elections, it is organized as two separate chambers, Lagtinget and Odelstinget. In Micronesia, four of the 14 members of the federal Congress are elected by the assemblies in each state. These
members are called Senators but they nonetheless work side by side with the directly elected members in a single chamber. According to Karvonen (2003: 122), these legislatures do not qualify as bicameral. A separate election to both chambers is a prerequisite of bicameralism. As for the upper house, appointment methods are also used. What matters is that representatives stand for the legislative office and are elected to one of the two chambers.

There is, however, a great deal of variety among bicameral systems. In some bicameral countries, the upper house is politically insignificant and almost powerless, whereas in others, both chambers are equally powerful. Differences are, in other words, largely manifested in symmetrical and asymmetrical forms of bicameralism. The power constellation between the chambers is dependent on several factors. First, the pattern of recruitment varies between upper houses. If the upper house is elected at-large in national elections according to the 'one man, one vote' -principle, both chambers represent the same interests and cannot be expected to behave very differently from each other. Asymmetrical bicameralism prevails. In several countries, however, the upper house represents regions instead of citizens. Indeed, one of the main reasons for having an upper house is to help resolve regional differences in countries which are geographically large and/or socially and culturally diverse. The upper house is rather often deliberately overrepresented to reduce the threat of 'tyranny by the majority'. The most obvious example is the United States where each state, regardless of size, has two senators. In addition to region, representation in the upper house may be based on ethnicity, language, religion or occupational group. Moreover, bicameral countries differ with respect to legislative procedures. In some countries, both chambers may initiate legislation, whereas in others, this right is reserved for the lower house only. In case of conflict between the chambers, two principal solutions apply: either the lower house has decisive decision-making power or both chambers have mutual veto, which force them to some kind of adjustment procedures.

The apparent question is whether these differences should be considered in the analysis of possible patterns between chamber structure and electoral system choice. Can we expect countries with symmetrical bicameralism to be in need of other electoral provisions than countries with asymmetrical bicameralism? If chamber structure is relevant to electoral system choice, the most fundamental dividing line is that between bicameral and unicameral countries, i.e. the existence
or non-existence of an 'additional' chamber. In this connection, thus, I prefer an 'either-or' to a 'more-or-less' conception of chamber structure. On the basis of majoritarian and consensus models of democracy (Lijphart 1984; 1999), bicameralism should be more associated with proportional systems than majoritarian elections. Chi-square tests are conducted.

## 4. RESEARCH DESIGN

### 4.1 Method and Material

There are four basic methods of establishing general empirical propositions: case study, comparative, statistical, and experimental methods (Lijphart 1971: 682). The scientific status of the case study method is rather ambiguous, because science is a generalizing activity, but indirectly case studies can contribute to the establishment of general propositions and to theory-building (1971: 691). The other three methods aim directly at scientific explanation by establishing general empirical relationships among two or more variables while all other variables are controlled for. The experimental method is an almost ideal method for scientific explanations, but due to practical and ethical impediments it can rarely be used in political science. The statistical method may be considered as an approximation of the experimental method. Empirically observed data are conceptually manipulated for the purpose of discovering controlled relationships among variables. The problem of control is handled by means of partial correlation. The only difference between the statistical and the comparative method, according to Lijphart, is that the number of cases the latter deals with is too small to facilitate systematic control by means of partial correlation. The comparative method should be used when the number of cases available makes further cross-tabulation in order to establish credible controls impossible. No clear dividing line between the statistical and the comparative method exists; the difference depends completely on the number of cases (Lijphart 1971: 83-84). C. Anckar asserts that the only clear difference between these two methods is that the statistical method uses tests of statistical significance (2004: 3).

Because of the similarities between the comparative and the statistical method, these are often regarded as two aspects of a single method. The term 'comparative method' is quite frequently used for indicating the method of multivariate empirical, but non-experimental, analysis. B. Guy Peters (1998: 10-22) distinguishes between five types of studies that are regarded as components of comparative politics. These are (1) case studies of politics in single countries, (2) analyses of institutions and political processes in a limited number of countries, (3) studies developing typologies or other forms of classification schemes for countries or sub-national units, (4) statistical or descriptive analyses of data from a
subset of the world's countries, and (5) statistical analyses of all countries of the world attempting to develop patterns and/or test relationships across the entire range of political systems.

Since a large-scale analysis of electoral system choice has not been conducted before, a broad perspective is needed in the present study, which, in turn, results in a large population. Given the large number of cases, I shall use the statistical method of comparison. Basically, as the title suggests, this is a comparative study. Explanations of electoral system choice are analyzed by comparing countries with different electoral systems. More precisely, however, associations between variables, and the mutual strength of explanatory variables, are studied by means of statistical analysis. Consequently, the study belongs to the fifth category of comparative studies mentioned by Peters. As evident from the title, relationships are studied at the macro-level, i.e. by comparing entire political systems. Since no established theory of electoral system choice exists, the basic strategy is explorative in nature.

Two different operationalizations of the dependent variable have been made. A detailed categorization of 15 electoral formulas, and a broad typology of four major groups of electoral systems. Statistical analysis is based on the latter, which distinguishes between plurality, majority, mixed, and proportional electoral systems. In terms of proportionality, this classification resembles an ordinal typology - mixed systems are more proportional than plurality/majority systems, and proportional systems are more proportional than mixed systems.

In a strict sense, however, the classification is not ordinal but categorical. First of all, not every plurality/majority system produces disproportional results, and not every proportional system results in proportional seat allocation. Secondly, the inherent proportionality of PR systems and non-proportional nature of majoritarian systems stem basically from the effects rather than from any basic characteristic of these systems. As a consequence, despite the common classification of electoral systems approximate to a scale of different degrees of proportionality, the fourscale classification is still categorical. Furthermore, definitions of the categories do not meet the criteria for a pure ordinal scale. Logistic regression is therefore preferred to OLS (ordinary least squares) regression. Since the dependent variable consists of four values, multinomial logistic regression is primarily applied. In
binary logistic regression, category A is compared to category B. Four categories on the dependent variable implies that six such comparisons has to be conducted: A to $\mathrm{B}, \mathrm{A}$ to C , A to $\mathrm{D}, \mathrm{B}$ to $\mathrm{C}, \mathrm{B}$ to D , and C to D . A discussion on which coefficients are presented is provided in the chapter on multivariate analysis.

The multiple analyses are preceded by descriptive and bivariate analyses in which simpler methods are used. Mean value analyses, frequencies, chi-square tests, and correlation analyses are applied in order to explore bivariate patterns between determinants and the dependent variable. Due to the different nature of the explanatory variables, the classification and identification of electoral systems varies from case to case; some independent variables require a more detailed categorization, whereas the four-scale classification constitutes the logical basis of comparison in other contexts.

Data on electoral systems and the ten explanatory variables is collected from a variety of sources. Concerning the dependent variable, the main sources are Chronicle of Parliamentary Elections, provided by the Inter-Parliamentary Union, and different volumes in the series of election data handbooks. Since 1967, InterParliamentary Union has annually reported on national legislative elections held throughout the world, including descriptions of current electoral systems. The Parline Database [http://www.ipu.org/english/home.htm], i.e. Inter-Parliamentary Union on-line, has also been used. A multi-national research team directed by Nohlen has recently carried out a systematic and historically complete documentation of elections and electoral systems in all countries of the world. Elections in Africa (1999) was the first volume in the series called Elections Worldwide. Two years later, a two-volume compendium of electoral data for all the states in Asia and the Pacific was published. The fourth volume, which covers electoral data on the American continent, has not been used in this study. Data on American countries is mainly based on Handbuch der Wahldaten Lateinamerikas und der Karibik (Nohlen 1993b). The handbooks provide electoral data since independence of each country to the present day. Concerning data on countries with mixed electoral systems, Massicotte and Blais' (1999) article 'Mixed Electoral Systems: A Conceptual and Empirical Survey’ in Electoral Studies has been useful. Sometimes different sources provide different information on electoral systems. In these cases, I have relied on the volumes in the series of Elections Worldwide and the survey by Massicotte and Blais (1999).

Concerning data on party system fragmentation and party system transformation, the volumes mentioned above have provided a great deal of the relevant data. As to party system fragmentation, additional sources are The International Almanac of Electoral History by Thomas Mackie and Richard Rose (1974) and Cross-National Time-Series Data Archive [http://www.databanks.sitehosting.net/]. The former reports election results in 23 established democracies from the late nineteenth century onwards, whereas the latter provides data on party system fragmentation (Rae's measure of fragmentation) in all countries of the world from 1815 to 1995. The estimates at intervals of ten years in Britannica Book of the Year 1999 have been used for coding the size variable. Information on population size around 2000 has been taken from The World Factbook [http://www.odci.gov/cia/publications/factbook/index.html]. The following sources have been used for determining ethnic and cultural diversity during the period 1945-2003: Svensk uppslagsbok (relevant editions 1947-1955), The World in Figures (editions 1981 and 1987), and The World Factbook.

Estimation of whether electoral system choices qualify as processes of diffusion or not is based on statistics in The World in Figures (1981; 1987), Britannica Book of the Year (1999), The World Factbook, and the map of the world. Information on colonial legacy is collected from a number of sources, mainly The World Factbook. The above mentioned volumes in the series of Elections Worldwide and Chronicle of Parliamentary Elections have provided information on the year of each electoral system choice. Data on form of government, territorial organization and chamber structure, is collected from the following sources: the volumes of Elections Worldwide, The World Factbook, Statsskick: att bygga demokrati (Karvonen 2003), and Political Systems of the World (Derbyshire and Derbyshire 1989). Decisions on democratic status are based on ratings in Freedom House [http://www.freedomhouse.org] and the Polyarchy dataset [http://www.svt.ntnu.no/iss/data/vanhanen/]. The volumes of Elections Worldwide and Handbuch der Wahldaten Lateinamerikas und der Karibik (Nohlen 1993b) have provided additional information.

### 4.2 Population

The unit of analysis is electoral system choice. All choices of electoral systems in independent countries between 1945 and 2003 are observed, irrespective of the way in which they have been adopted. This comprises the first choice of electoral systems in countries that have proclaimed independence during the relevant period as well as every electoral system change in countries that previously have had electoral laws as independent nations. There are, however, several countries in which electoral provisions existed and elections had been held before independence. A common feature of these is that they have all been subjected to some kind of foreign rule. This means that the electoral system had already been chosen when the country became independent. The study consists of independent countries only - autonomous territories that may become independent in the future are not paid attention to. Should I observe the year of electoral system choice for each country irrespective of whether independence had been received at that point in time or not? Should I not pay attention to these cases at all? Considering that there are several autonomous regions with electoral institutions in the world, the answer to the first question should be in the negative. Several of these regions may become independent in the future but they are, nonetheless, excluded from the study since it deals, as mentioned, exclusively with independent countries. However, an electoral system choice in a country two years before independence is not less important than a choice that is implemented two years after independence. Therefore, electoral system choice that is made slightly before independence must not be excluded.

The dilemma is to decide the moment of electoral system choice in countries that already had electoral provisions when independence was declared. As mentioned in section 3.3.2.3, I have decided to regard the year of independence as the year of electoral system choice. This restriction is justified by the fact that in most cases, the introduction of pre-independence electoral provisions formed a part of the independence process. There are, nevertheless, some exceptions to this rule in the Caribbean and the Pacific. Antigua \& Barbuda, St. Lucia, and St. Kitts \& Nevis, for example, had held elections several decades before finally receiving independence. The first general elections in Antigua \& Barbuda took place in 1951; i.e. 30 years before the archipelago became independent (Hillebrands 1993a:
22). ${ }^{30}$ Nevertheless, the coded year of electoral system choice is 1981. If I had coded 1951 as the official year of choosing an electoral system, one may ask why other non-independent territories in which general elections have been held are excluded from the analysis. However, the study focuses on electoral system choice in independent countries - not in every single territory of the world where elections are held. Still, there is no reason to exclude countries in which the former colonial power has introduced electoral provisions.

The decision to use the year of independence as the year of electoral system choice in these countries is also justified by the fact that the country in question has had the opportunity to reject the old electoral system at the time of independence. In this way, the colonial diffusion variable also appears more meaningful: is the old system rejected when the first independent constitution (and electoral law) is adopted or does the newly independent country inherit the electoral system of their former colonial masters? As for countries without pre-independence electoral institutions, the relevant electoral laws determine the coded year of electoral system choice. If information on the date of the electoral law is lacking, the year of the first parliamentary elections under the new electoral system is decisive.

Another reason not to use the year of introducing pre-independence electoral provisions as the official coded year of electoral system choice is that information on the first elections is often inadequate, including the exact point in time. Besides, the only cases that would fulfil the requirements of democracy, according to this strategy, would be those of electoral system change. Some further arguments are presented when the case of Mauritius is discussed.

Electoral system choice in democratic countries is also studied separately. Needless to say, elections in democratic countries are normally considered more important than elections in non-democratic countries. Accordingly, electoral system choice is of greater importance in countries that allow multi-party competition. If all candidates in an election belong to the same political party, seat allocation is only concerned with who is elected and who is not. A proportional system is not needed, since no seat allocation between political parties takes place. However, all non-democratic countries are not authoritarian one-party states -

[^27]several countries that do not fulfil the requirements of democracy allow some competition. Consequently, majoritarian systems must not be regarded as universally prevailing in non-democratic countries. Irrespective of the role of electoral systems in non-democracies, the inclusion of all countries with electoral systems is justified in a study that aims at explaining electoral system choice from a contextual perspective.

In distinguishing between democratic and non-democratic countries, we need a measurement of the level of democracy. Democracy is usually considered a more-or-less rather than an either-or phenomenon. Democracy is associated with several elements, or requirements, which a country may fulfil to varying extent. Consequently, no absolute dividing line between democracy and non-democracy exists. Nevertheless, a classification based on two categories is far from inconceivable. According to Sartori, "the either-or type is the very logic of classification building" (1970: 1038).

The most widely used source for determining the level of democracy is Freedom House's yearly survey of political rights and civil liberties [http://www.freedomhouse.org/]. These two general sets of characteristics constitute the overall concept of freedom in the world. The description of political rights and civil liberties also represents the overall definition of democracy in this study. For each of the two dimensions, a scale ranging from 1 to 7 is applied, with 1 representing the most free and 7 the least free. The concept of political rights implies that the people are allowed to participate freely in the political process, i.e. the system by which authoritative policy makers are chosen, and binding decisions affecting the national, regional, or local community are made. A democratic society is, with regard to political rights, characterized by universal suffrage and the right for adult citizens to compete for decision-making positions. In evaluating political rights in each country, Freedom House applies a 'checklist' made up of eight criteria. These are as follows:
(1) free and fair elections of the head of state and/or head of government
(2) free and fair elections of the legislature
(3) fair electoral arrangements (e.g. laws, campaigning and tabulation of ballots)
(4) elected representatives provided with real power
(5) fair competition between freely organized parties or groupings
(6) fair opportunities for the opposition to function within the system
(7) absence of political influence by other powerful groups (e.g. the military, totalitarian parties and religious hierarchies)
(8)reasonable opportunities for minorities to participate in the political process

The concept of civil liberties implies freedom of opinion, freedom to develop institutions, and personal autonomy without state involvement. The 'checklist' of civil liberties consists of 13 criteria, grouped into four main categories. These are:
(1) freedom of expression and belief
(2) association and organizational rights
(3) rule of law and human rights
(4) personal autonomy and economic rights

On the basis of these criteria, ratings from 1 to 7 are calculated for each country (Freedom in the World 2000-2001: 648-656). Countries with low level of political rights also score low points on civil liberties, and vice versa. It is obvious that free and fair political competition cannot exist without a substantial degree of freedom and human rights.

Within the framework of the present study, the dimension of political rights is more relevant since it deals more with elections than the other dimension. Scores on political rights are therefore decisive in separating democracies from nondemocracies. Countries that score 1 or 2 must without doubt be included in the democratic sample. The exclusion of countries with the values 6 and 7 is selfevident as well. Hence, the values 3-5 constitute the borderline between democracy and non-democracy. According to the explanations of political rights in the 20002001 Freedom House edition, damaging elements in countries receiving these values are, e.g. civil war, heavy military involvement in politics and unfair elections. On the other hand, they "may still enjoy some elements of political rights such as the freedom to organize non-governmental parties and quasi-political
groups, reasonably free referenda, or other significant means of popular influence on government" (Freedom in the World 2000-2001: 652).

In order to avoid countries with serious damaging elements, I exclude countries with the values 4 and 5 . Hence, the requirement of the level of democracy is 3 or lower on political rights. In studies of electoral systems in general, countries that score 4 are often included. Since a data set of all countries already exists, a more rigorous definition of democracy in the present study seems appropriate. A further criterion for inclusion in the democratic sample is that the value 3 or lower has been received every year since the last elections prior to the observed year, i.e. the year in which the electoral system has been adopted. This criterion guarantees that the electoral system has been chosen by a democratically elected leadership. In some studies, countries are required to have maintained a sufficient level of democracy for at least two subsequent elections, or during the last decade in order to qualify as democracies. However, these studies are most often concerned with effects of political institutions, which means that some degree of democratic continuity and stability among the units of analysis is needed in order to provide reliable estimations. The critical matter in this study is whether the electoral system has been adopted by a democratically (and domestically) chosen elite or not. ${ }^{31}$ For instance, the introduction of list PR in Poland in 1991 was not a democratic choice of electoral system, because the previous elections in 1989 resulted in the value 4 on political rights in Freedom House's ratings. In contrast, the adoption of list PR in Bulgaria in 1991 is regarded as a democratic choice, since the country had already reached the required level of democracy as a consequence of the parliamentary elections held the previous year.

However, Freedom House's ratings cover the time period from 1972 onwards, which implies that other sources are needed for a classification of countries between 1945 and 1972. For this purpose, I shall partly rely on the Polyarchy dataset, which is compiled by Tatu Vanhanen and, at the time of writing, is available on-line [http://www.svt.ntnu.no/iss/data/vanhanen/]. The dataset provides indices of democracy in 187 countries over the period 1810 to 1998. The index of democracy is the same as Vanhanen uses in a number of works on democratization

[^28](e.g. 1984; 1990). The index is based on two components: competition and participation. The smaller parties' share of the votes cast, i.e. all parties but the largest one, in parliamentary or presidential elections or both represents the degree of competition. The percentage of the total population who voted in these elections represents the degree of participation. ${ }^{32}$ The index of democracy (ID) is calculated by multiplying these two components and dividing the product by 100. High values on both competition and participation produce high democracy values, and low values on one of the two, or both, result in low democracy values (Vanhanen 1984: $28-32$ ). The lowest possible value is $0-$ a maximum value is not defined. In practice, the most democratic countries exceed ID 40 but not 50 .

A criterion of using Vanhanen's index as a complementary measure of democracy is that it corresponds to the ratings by Freedom House. In his later volume mentioned above, Vanhanen (1990: 25) compares his three indicators (i.e. competition, participation and ID) with the arithmetic means of political rights and civil liberties in Freedom House (also called Gastil's ratings) over the period 19801987. With the exception of participation, Vanhanen's indices are strongly correlated with Freedom House's combined measure of democracy. The weakest and strongest correlation coefficients are -0.811 and -0.902 respectively. ${ }^{33}$ In my study, however, only the dimension of political rights is paid attention to. Nonetheless, a comparison between Vanhanen's ID and Freedom House's political rights from 1980 to 1988 produces similar results: the correlation coefficients vary between -0.836 and -0.865 .

In order to separate democracies from non-democracies, a threshold value is needed. Vanhanen selects 5.0 index points as a threshold value. In addition, he stipulates two further criteria: the value of participation must not be lower than 10 per cent, whereas the threshold of competition is 30 per cent. Accordingly, countries that fulfil these criteria are regarded as crossing the threshold of democracy. Do these criteria correspond to the threshold value of 3 on political rights? The question can easily be explored by constructing diagrams in which the values of both scales are plotted for each year between 1980 and 1988. An analysis

[^29]of such diagrams results in the following conclusions. First, the threshold of ID 5.0 is too lenient compared to the threshold of 3 on political rights. Each year, between five and 15 countries receive higher ID values than 5.0, although they do not meet the criterion of 3 or lower on political rights. Second, we cannot be completely sure that countries scoring lower than 5.0 on Vanhanen's scale also get higher values than 3 (which indicate a low level of democracy) on political rights. Every year from 1980 to 1988, a few countries verify this conclusion.

Despite high correlation coefficients between Vanhanen's ID and Freedom House's political rights, we cannot rely on any specific threshold value when distinguishing democracies from non-democracies before 1972. However, the Polyarchy dataset is not useless. It can be used as a guideline for evaluating whether a country has been democratic or not at the relevant point in time. In addition, I have used the volumes in the series of Elections Worldwide to get a general picture of the politics and the state of democracy in every single case when determining whether the criteria of democracy are fulfilled or not. Some other sources have also been used, e.g. Handbuch der Wahldaten Lateinamerikas und der Karibik (Nohlen 1993b). The colonial background also matters in this respect, since we know that Britain established democratic institutions in large parts of its colonial empire, whereas other colonial powers paid less attention to indigenous representative institutions (Diamond and Lipset 1995). ${ }^{34}$

A further dilemma is to decide whether a country that has chosen its electoral system before independence should be considered democratic or not. Neither Freedom House nor Vanhanen's dataset provide information on the level of democracy prior to independence. Again, I have to make a general estimation of the conditions in each case by means of the sources mentioned above. I shall use the cases of Mauritius and Antigua \& Barbuda to illustrate this dilemma. Mauritius became independent in 1968, one year after the constitution and the electoral law were enacted and the first general elections were held (Krennerich 1999a: 603622). This implies that the decision on the electoral system (BV) was taken under non-democratic circumstances, although the elections fulfilled democratic

[^30]standards and Mauritius was democratic when independence was received. Consequently, Mauritius' choice of electoral system in 1968 (as coded) was nondemocratic. However, Antigua \& Barbuda's electoral system choice in 1981 (as coded) is considered democratic, even though the country could not possibly be democratic when the plurality system was introduced prior to the first elections in 1951. The critical point is under which circumstances, in democratic terms, the electoral law and/or constitution of the (forthcoming) independent country is written. When the electoral law and the constitution of independent Antigua \& Barbuda were adopted, the country already had some experience of democracy. However, Mauritius was not democratic when its electoral law and constitution that paved the way for independence were introduced. Countries that were democratic before World War II and continued functioning as democracies immediately after that are considered democratic, despite the possible absence of democratic politics during the war.

## 5. THE RATIONAL PERSPECTIVE

In chapter 3, explanations of electoral system choice were theoretically dealt with. Explanations were divided into three different perspectives: a rational, a cultural and historical, and an institutional perspective. On the basis of these approaches, ten independent variables were derived: (1) ethnic and cultural diversity, (2) population size, (3) party system structure, (4) party system transformation, (5) colonial diffusion, (6) regional diffusion, (7) temporal diffusion, (8) form of government, (9) territorial organization, and (10) chamber structure. We are now ready to empirically study the associations between these variables and electoral system choice. In the following, bivariate and descriptive analyses of each independent variable in connection to electoral system choice are provided. Chapter 5 deals with the rational perspective. Patterns of diffusion are analyzed in chapter 6. In chapter 7, variables of the institutional perspective are in focus. Multiple patterns are analyzed in chapter 8.

### 5.1 Ethnic and Cultural Diversity

### 5.1.1 Ethnic and Cultural Diversity - All Countries

In this section, the impact of ethnic and cultural diversity on electoral system choice is analyzed. By way of introduction, some descriptive information is provided. The dispersion of cases according to the level of ethnic and cultural fragmentation is given in table 5.1. A low level of ethnic fragmentation characterizes 40 per cent of all cases. The group of cases with high level of fragmentation is also considerably larger than the categories with bipolar and medium-sized fragmentation. When the level of cultural fragmentation is observed, the number of low-fragmented cases is reduced to 57 , i.e. slightly more than one fifth of the entire population. The group of high fragmentation is naturally the largest since the cultural fragmentation variable observes the cleavage that returns the highest level of fragmentation. Concerning the dispersion of electoral system choice among the four categories, the operationalization of both variables is rather successful since no category is poorly represented. The smallest category is that of bipolar cultural fragmentation with 24 cases. One case is missing - I have not managed to find detailed information on ethnicity and language in East Timor.

Table 5.1. Ethnic and cultural fragmentation. Frequencies.

| Level of fragmentation | Ethnic (N) | \% | Cultural (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 108 | 40.4 | 57 | 21.3 |
| Bipolar fragmentation | 34 | 12.7 | 24 | 9.0 |
| Medium-sized fragmentation | 46 | 17.2 | 72 | 27.0 |
| High fragmentation | 79 | 29.6 | 114 | 42.7 |
|  |  |  |  |  |
| Total N | 267 | 100 | 267 | 100 |

In the following, analyses of how countries with different levels of fragmentation have chosen electoral systems are provided. Chi-square tests are conducted in order to determine whether there is a relationship between ethnic/cultural diversity and electoral system choice. It should be pointed out that the number of cases is rather low in the 'democratic' samples, considering that chi-square analysis is undertaken. Therefore, results should be carefully interpreted. If countries have taken ethnic and cultural traits into consideration when choosing electoral systems, the share of list PR, STV and AV should increase as we move towards a higher level of fragmentation. First of all, the number of countries that have adopted proportional systems or AV is much smaller than the number of countries that have chosen other kinds of electoral systems. A proportional system (plus AV) has been adopted 72 times compared to 195 cases in the other category.

Table 5.2. Ethnic fragmentation and electoral system choice. Crosstabulation, Pearson ChiSquare.

| Level of ethnic fragmentation | List PR, STV, AV (N) | \% | Other systems (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 29 | 26.9 | 79 | 73.1 |
| Bipolar fragmentation | 11 | 32.4 | 23 | 67.6 |
| Medium-sized fragmentation | 14 | 30.4 | 32 | 69.6 |
| High fragmentation | 18 | 22.8 | 61 | 77.2 |
|  |  |  |  |  |
| Total N | 72 | 27.0 | 195 | 73.0 |

Note: Chi-square value 1.484 , sig. . 686

The chi-square value concerning ethnic fragmentation and electoral system choice in table 5.2 is 1.484 , indicating that there is no association between these variables. We notice that the share of proportional systems (and AV) slightly increases from low to bipolar fragmentation, but decreases from bipolar to medium-sized
fragmentation as well as from medium-sized to high level of fragmentation. Among those countries that are most in need of conflict-mitigating electoral systems, the share of appropriate systems is merely 23 per cent, whereas other kinds of electoral systems have been chosen in three cases of four.

Table 5.3. Cultural fragmentation and electoral system choice. Crosstabulation, Pearson ChiSquare.

| Level of cultural fragmentation | List PR, STV, AV (N) | \% | Other systems (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 19 | 33.3 | 38 | 66.7 |
| Bipolar fragmentation | 8 | 33.3 | 16 | 66.7 |
| Medium-sized fragmentation | 18 | 25.0 | 54 | 75.0 |
| High fragmentation | 27 | 23.7 | 87 | 76.3 |
|  |  |  |  |  |
| Total N | 72 | 27.1 | 195 | 72.9 |

Note: Chi-square value 2.432 , sig. . 488

Neither is there a significant relationship between cultural fragmentation and the dependent variable. Table 5.3 shows that the share of proportional and AV systems among countries with low and bipolar level of fragmentation is higher than in the categories with medium-sized and high level of fragmentation. Again, the smallest share of proportional systems (and AV) is observed among countries with a high level of fragmentation. This category consists of such countries as the Philippines, the Federated States of Micronesia, the Gambia, Tanzania and Zambia which all apply SMP. In 2002, the multi-ethnic Papua New Guinea re-introduced AV after having replaced it with SMP when independence was proclaimed 27 years earlier. Hence, the findings in both samples contradict the theoretical assumptions.

### 5.1.2 Ethnic and Cultural Diversity - Democratic Countries

In the following, the pattern of ethnic/cultural diversity and electoral system choice in democratic countries is dealt with. The number of choices made under democratic circumstances is 63 . The frequencies of electoral system choices in the four categories are given in table 5.4. Concerning ethnic fragmentation, half of all 'democratic' choices belong to the category of low fragmentation level. Only seven cases are observed in the category with bipolar fragmentation.

Table 5.4. Ethnic and cultural fragmentation in democracies. Frequencies.

| Level of fragmentation | Ethnic (N) | \% | Cultural (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 32 | 50.8 | 17 | 27.0 |
| Bipolar fragmentation | 7 | 11.1 | 4 | 6.3 |
| Medium-sized fragmentation | 9 | 14.3 | 17 | 27.0 |
| High fragmentation | 15 | 23.8 | 25 | 39.7 |
|  |  |  |  |  |
| Total N | 63 | 100 | 63 | 100 |

In comparison with all cases of electoral system choice in table 5.1, the category with low level of fragmentation has grown at the expense of bipolar and especially high level of fragmentation. As for the variable that measures cultural diversity, the largest group is that with high level of fragmentation - two cases of five belong here. The categories with low and medium-sized level of fragmentation are also rather well represented, whereas the category with bipolar fragmentation is much smaller than the other three.

Table 5.5. Ethnic fragmentation and electoral system choice in democracies. Crosstabulation, Pearson Chi-Square.

| Level of ethnic fragmentation | List PR, STV, AV (N) | \% | Other systems (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 11 | 34.4 | 21 | 65.6 |
| Bipolar fragmentation | 2 | 28.6 | 5 | 71.4 |
| Medium-sized fragmentation | 3 | 33.3 | 6 | 66.7 |
| High fragmentation | 2 | 13.3 | 13 | 86.7 |
|  | 18 | 28.6 | 45 | 71.4 |
| Total N | 18 | 45 |  |  |

Note: Chi-square value 2.335, sig. . 506

In table 5.5 and 5.6, the association between level of fragmentation and electoral system choice in democratic countries is studied. Again, other systems than PR and AV have been chosen much more frequently; the share of other systems being 71.4 per cent compared to 28.6 per cent in the category with proportional systems and AV. Concerning ethnic fragmentation, a pattern that contradicts the theoretical outlines is observed. Other systems than PR and AV are especially frequent in the category with a high level of fragmentation.

Table 5.6. Cultural fragmentation and electoral system choice in democracies. Crosstabulation, Pearson Chi-Square.

| Level of ethnic fragmentation | List PR, STV, AV (N) | \% | Other systems (N) | \% |
| :--- | ---: | ---: | ---: | ---: |
| Low fragmentation | 7 | 41.2 | 10 | 58.8 |
| Bipolar fragmentation | 1 | 25.0 | 3 | 75.0 |
| Medium-sized fragmentation | 4 | 23.5 | 13 | 76.5 |
| High fragmentation | 6 | 24.0 | 19 | 76.0 |
|  | 18 | 28.6 | 45 | 71.4 |
| Total N |  |  |  |  |

Note: Chi-square value 1.816 , sig. . 611

PR and AV are more evenly distributed among the four categories when cultural fragmentation is observed in table 5.6, but the tendencies still resemble those in the previous table. Both patterns are much too vague in order to return a significant relationship. Not even among democratic countries are electoral systems chosen as the theory of electoral systems and cultural diversity suggests.

Despite the fact that proportional systems and AV are considered as effective tools for mitigating conflict in divided societies, such countries have not adopted these electoral provisions to any greater extent. All culturally fragmented countries are naturally not marred by tensions between different groups, but even in peaceful societies these electoral systems may, to a greater extent than other systems, integrate different segments of the society and promote cooperation. However, concerning the ethnic component of countries' societal structure, electoral systems are not rationally chosen. In fact, plural countries have to an overwhelming extent chosen inappropriate systems with regard to the ethnic, linguistic and religious composition. The four categories of fragmentation correspond to an ordinal variable that is used in the multiple analyses.

### 5.2 Population Size

### 5.2.1 Population Size - All Countries

Population size is the other structurally generated variable of the rational perspective. Again, two different operationalizations are used: in addition to a continuous treatment, the effect of population size is studied by means of threshold
values. Each integer of the logarithmic population size represents one category. The continuous variable is subject to correlation analysis, whereas the latter is descriptively dealt with. In both cases, the broad category of four basic electoral systems is used. It should be observed that correlation analysis is not a very good technique for measuring the relationship between two variables of which one is categorical. However, the dependent variable of this study is reminiscent of an ordinal variable: majoritarian and PR systems are poles apart and mixed systems constitute an intermediate category. Notwithstanding, the results must be interpreted with cautiousness.

Table 5.7. Country size and electoral system choice. Correlation analysis, Spearman's rho.

| Independent variable | Electoral system choice |
| :--- | ---: |
| Country size | $.167^{* *}$ |
| $\mathbf{N}$ | 267 |

Note: ** $=$ significant at the 0.01 level

The correlation between population size and electoral system choice is given in table 5.7. The analysis is based on 267 cases - I have not managed to find information on population size in South Vietnam in 1956 when SMP was introduced. There is a significant relationship between population and electoral system choice: large countries apply proportional systems to a higher extent than small countries. However, despite being significant at the 0.01 level, the relationship is not very strong and therefore we need to look more closely at electoral system choice in countries at different levels of population size.

The connection between electoral systems and population at different levels is given in table 5.8. Results indicate that there is no threshold over which the pattern of electoral system choice changes radically. The smaller the country, the greater the probability of choosing a plurality system. The share of majority systems is somewhat the same at each level. The division between countries with less than one million citizens into three categories - one with a population below 10000 , a second with no more than 100000 people, and a third with a population ranging from 100000 to 1 million - may appear unnecessary. Every country with less than one million citizens can be regarded as a small country, thereby in need of the same kind of electoral system according to the theoretical arguments.

Notwithstanding, table 5.8 returns a clear pattern. Plurality systems constitute a majority of all electoral system choices ( 35 cases of 56) in microstates, and three cases of four are majoritarian ones.

Table 5.8. Country size and electoral system choice. Threshold values.

| Population | Plurality <br> (N) | \% | Majority (N) | \% | Mixed <br> (N) | \% | PR (N) | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-10000 | 1 | 50.0 | 1 | 50.0 | 0 | 0.0 | 0 | 0.0 |
| 10000-100 000 | 7 | 50.0 | 2 | 14.3 | 4 | 28.6 | 1 | 7.1 |
| 100000 - 1 million | 27 | 67.5 | 4 | 10.0 | 1 | 2.5 | 8 | 20.0 |
| 1-10 millions | 43 | 34.1 | 18 | 14.3 | 27 | 21.4 | 38 | 30.2 |
| 10-100 millions | 26 | 31.7 | 15 | 18.3 | 18 | 22.0 | 23 | 28.0 |
| 100 m - 1 billion | 1 | 33.3 | 0 |  | 2 | 66.7 | 0 | 0.0 |
| Total N | 105 | 39.3 | 40 | 15.0 | 52 | 19.5 | 70 | 26.2 |

The fourth category with population figures ranging from one to ten millions is the largest consisting of totally 126 cases. The share of proportional systems in this category is somewhat higher than the share of proportional systems in the total data sample. However, majoritarian systems, especially plurality ones, are still more frequent considering that countries of this size are, at least according to Rokkan, still quite small. ${ }^{35}$ The category of countries with a population between ten and a hundred millions consists of 81 cases. Compared to the previous category, the proportion between plurality, majority, mixed and proportional systems has not changed to any greater extent. The sixth group with a population size between 100 millions and one billion consists of three cases only. India has chosen a plurality formula, whereas Russia and Japan adopted mixed-superposition in the 1990s.

The fourth category consists of almost half of all cases of electoral system choice in this study. One may suggest that a possible threshold value is present among this group of countries, but a division between countries with one to five million and five to ten million people does not substantially alter the picture. The only difference is that the share of mixed systems increases by 12 per cent at the expense of proportional and plurality systems in the larger group. The fifth group

[^31]is also quite large, and therefore a split between countries with less and more than 50 million citizens may provide some further information. Among countries with ten to 50 million people, the proportion between the four types of electoral systems is approximately the same as in the category with one to ten million people. Among countries with 50 to 100 million people, however, the share of mixed systems increases by 16 per cent, while the share of proportional systems decreases by 17 per cent. Only two countries in this sub-category - Indonesia (1953) and France (1986) - have adopted proportional systems, whereas mixed systems have been chosen five, plurality systems four, and majority systems three times.

We may conclude that proportional systems are rare among very large countries. Instead, mixed systems are popular in countries with a huge population. It seems that there is a need for single-member constituencies in such countries. However, this holds true only for countries with at least 50 million people. Among countries with population figures ranging from one to 50 millions, no distinct pattern between size and electoral system choice is discernable. Majoritarian systems are more frequent but the share of proportional systems is, notwithstanding, somewhat larger than in the total population. The findings are also in accordance with D. Anckar's (2002) conclusion with regard to the possible link between smallness and electoral system choice. Majoritarian electoral systems, rather than PR, dominate among small countries. This association is strong enough to bring about a significant correlation between size and electoral system choice. These findings contradict the theoretical arguments put forward by Rokkan (1970), Katzenstein (1985) and Rogowski (1987).

### 5.2.2 Country Size - Democratic Countries

This section deals with population size and electoral system choice in democracies only. The correlation coefficient is presented in table 5.9. The bivariate relationship among these 63 cases is considerably stronger than in the total data sample, suggesting that especially plurality systems are related to smallness. Given the nature of the dependent variable, however, one should not draw any farreaching conclusions on the basis of these results.

Table 5.9. Country size and electoral system choice in democracies. Correlation analysis, Spearman's rho.

| Independent variable | Electoral system choice |
| :--- | ---: |
| Country size | $.441^{* *}$ |
| $\mathbf{N}$ | 63 |

Note: ** $=$ significant at the 0.01 level

Possible threshold values over which patterns of electoral system choice changes radically are sought for in table 5.10 . The table shows that no such threshold value exists. Plurality systems constitute more than half of all systems chosen in democratic countries with less than one million people - as population size increases, the share of plurality systems declines drastically. The five majority systems that have been adopted in democracies are quite evenly distributed between the categories. Mixed and proportional systems are frequent among larger countries.

Table 5.10. Country size and electoral system choice in democracies. Threshold values.

| Population | Plurality <br> (N) | \% | Majority <br> (N) | \% | Mixed <br> (N) | \% | PR (N) | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-10000 | 1 | 50.0 | 1 | 50.0 | 0 | 0.0 | 0 | 0.0 |
| 10000-100 000 | 6 | 66.7 | 1 | 11.1 | 2 | 22.2 | 0 | 0.0 |
| 100000 - 1 million | 12 | 70.6 | 0 | 0.0 | 1 | 5.9 | 4 | 23.5 |
| 1-10 millions | 6 | 35.3 | 1 | 5.9 | 4 | 23.5 | 6 | 35.3 |
| 10-100 millions | 2 | 11.8 | 2 | 11.8 | 7 | 41.2 | 6 | 35.3 |
| 100 m - 1 billion | 0 | 0.0 | 0 | 0.0 | 1 | 100 | 0 | 0.0 |
| Total N | 27 | 42.9 | 5 | 7.9 | 15 | 23.8 | 16 | 25.4 |

Nauru and Tuvalu are the only democratic countries with less than 10000 citizens at the moment of electoral system choice. Nauru adopted AV in 1968 and Tuvalu chose SMP-BV ten years later. Among countries with a population ranging from 10000 to 100000 , nine electoral systems chosen under democratic circumstances are observed. Seven of these are majoritarian - three cases in the Pacific and four cases in the Caribbean. Seychelles and Monaco adopted mixed systems in 1976 and 2002 respectively. No PR system has been chosen among democratic countries in this category. In the third category with population figures ranging from 100000 to one million, four PR cases are identified: Iceland 1959, Malta 1964, Guyana

1966, and Cyprus 1981. Suriname adopted mixed-coexistence in 1975 - all other cases in this category are plurality systems. Among countries with more than one but less than ten million people, six cases of proportional as well as plurality systems of totally 17 are observed. The proportion of plurality systems in comparison with PR decreases still more in the fifth category, plurality having been adopted only in the Philippines (1946 and 2001). France introduced TBM in 1958 and again in 1988. Mixed systems are most popular, having been chosen in e.g. Venezuela 1993, Thailand 1997 and Madagascar 1998.

Five of totally six PR choices in the fifth category are observed in countries with a population between ten and 50 million people. There is, consequently, only one proportional choice (France in 1986) among those six democratic cases with a population ranging from 50 to 100 millions. Half of all cases, i.e. three (Italy 1993, Thailand 1997 and the Philippines 1998) of totally six, among countries with 50 to 100 million people are mixed systems, whereas France and the Philippines adopted majoritarian systems in 1988 and 2001 respectively. The only case in the sixth category - the Japanese electoral reform in 1994 - belongs to the family of mixed systems.

Thus, we may conclude that mixed electoral systems are also popular among very large democracies. The overall pattern that was observed in the total data sample is even clearer among democracies. Plurality systems dominate among small countries, whereas $P R$ is more frequent in middle-sized and rather large countries. Among very large countries, however, PR is quite rare at the expense of foremost mixed systems. By using majoritarian and mixed systems with single-member districts, an element of geographical accountability is maintained in populous countries. As for the rest, however, it seems dubious that country size really explains electoral system choice, since rational motives for the observed pattern are lacking. The continuous variable is used in the multivariate analyses.

### 5.3 Party System Structure

### 5.3.1 Party System Structure - Democracies and Non-democracies

In order to detect a possible link between party system structure and electoral system choice, cases of electoral system change are compared to cases of non-
change. More exactly, a subset of countries that have changed from plurality systems to proportional systems is compared to a subset of countries that have held at least three subsequent parliamentary elections under the plurality rule. If party system structure influences electoral system choice, the effective number of parties, as defined by Laakso and Taagepera (1979), should be significantly higher in the former group prior to electoral system choice. Likewise, a subset of countries that have replaced PR with plurality systems is compared to a subset of countries that have held at least three subsequent parliamentary elections under PR. The degree of party system fragmentation is assumed to be lower among countries that have adopted plurality systems.

The comparison group of countries that apply plurality systems, as defined in section 3.3.1.3, consists of 27 countries. The number of elections in the category of changes from plurality to proportional systems is 15 , conducted in nine countries. Needless to say, the actual number of countries that have changed electoral systems in the referred direction is much larger, but several countries are disqualified because one-party rule has prevailed before the electoral reform. Some countries are, furthermore, excluded because data has not been accessible. These circumstances also apply to countries that have changed from PR to plurality systems. The former mentioned categories are compared in table 5.11 by mean value analysis.

Table 5.11. Party system fragmentation in two samples of countries with plurality systems. Mean values.

| Electoral system | Party system <br> fragmentation | $\mathbf{N}$ | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from plurality to PR | 3.28 | 15 | 2.84 |
| Plurality systems | 2.79 | 27 | 1.10 |

Note: Eta Squared .016, sig. . 429

As hypothesized, the degree of party system fragmentation is higher in the category of electoral system change from plurality to PR than in the category of 'retained' plurality systems, but the difference is rather small and not statistically
significant. ${ }^{36}$ The large standard deviation among the category of PR reforms contributes to the non-significant relationship. The most fragmented party system in the group of electoral system change is observed in Morocco: the effective number of parties was 10.71 following the last plurality elections in 1997. Several examples of very low-fragmented party systems, e.g. in Argentina, El Salvador and Cape Verde, are also observed in the same category.

Table 5.12. Party system fragmentation in two samples of countries with proportional electoral systems. Mean values.

| Electoral system | Party system <br> fragmentation | $\mathbf{N}$ | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from PR to plurality | 7.26 | 4 | 2.08 |
| Proportional systems | 4.38 | 53 | 2.01 |

Note: Eta Squared .123, sig. . 007

In table 5.12, countries that have replaced PR with plurality systems are compared to 'retained' proportional systems in the countries of the world. There is a significant difference between the groups but the relationship contradicts the assumption, i.e. the category of change from PR to plurality returns a higher degree of party system fragmentation than the comparison group. However, the category of electoral system change consists of elections in two countries only, Greece and Congo (-Kinshasa). The effective number of parties in e.g. Congo (-Kinshasa) in 1967 was 8.5.

Since the number of electoral system change is rather small, similar analyses are carried out with enlarged samples of changes that also include changes to mixed electoral systems (plurality + PR). The category of electoral system change from plurality to both mixed and proportional systems consists of 33 cases. The level of party system fragmentation in the enlarged category of electoral system change, presented in table 5.13 , is somewhat higher than in the corresponding category in table 5.11. The difference between the groups is not statistically significant despite the larger population. Fragmented party systems prior to electoral reform is

[^32]observed in e.g. South Korea and the Republic of Macedonia, whereas mixed systems have been adopted in e.g. Mexico and Lesotho despite a low level of fragmentation.

Table 5.13. Party system fragmentation in two samples of countries with plurality systems. Mean values.

| Electoral system | Party system <br> fragmentation | N | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from plurality to mixed and PR | 3.43 | 33 | 2.22 |
| Plurality systems | 2.79 | 27 | 1.10 |

Note: Eta Squared .031, sig. . 178

53 proportional systems are compared to eleven cases of electoral system change in table 5.14. The level of party system fragmentation in the category of countries that have replaced PR with plurality or mixed systems is slightly higher than among proportional systems in general, which suggests that party system structure does not influence electoral system choice. A low level of party system fragmentation in Paraguay, Egypt and Senegal contributes to the smaller mean value for cases of change compared to the corresponding value in table 5.12.

Table 5.14. Party system fragmentation in two samples of countries with proportional systems. Mean values.

| Electoral system | Party system <br> fragmentation | $\mathbf{N}$ | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from PR to plurality and mixed | 4.73 | 11 | 2.55 |
| Proportional systems | 4.38 | 53 | 2.01 |

Note: Eta Squared .004, sig. . 602

### 5.3.2 Party System Structure - Democracies

In this section, a similar analysis is conducted among democratic countries. Party system fragmentation in plurality systems in general and cases of change from plurality to PR are compared in table 5.15 . There is practically no difference between the categories. However, only three democratic countries (Turkey, Cyprus and Sri Lanka) have replaced plurality systems with proportional systems. The
small standard deviation values indicate that there are only small discrepancies from the mean values of the groups.

Table 5.15. Party system fragmentation in two samples of democracies with plurality systems. Mean values.

| Electoral system | Party system <br> fragmentation | N | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from plurality to PR | 2.52 | 5 | 0.65 |
| Plurality systems | 2.60 | 17 | 0.68 |

Note: Eta Squared .003, sig. . 820

The difference between PR systems and cases of change from PR to plurality systems that was observed in the previous section (in the wrong direction according to the hypothesis) is still present but not significant when nondemocracies are excluded. However, the category of electoral system change in table 5.16 consists of two Greek elections only, which makes the comparison as good as futile. The Greek legislative elections in 1950 and 1951 returned the values of 8.01 and 4.15 respectively.

Table 5.16. Party system fragmentation in two samples of democracies with proportional systems. Mean values.

| Electoral system | Party system <br> fragmentation | N | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from PR to plurality | 6.08 | 2 | 2.73 |
| Proportional systems | 4.11 | 44 | 1.75 |

Note: Eta Squared .051, sig. . 131

Expanded samples of the effective number of parties among plurality systems are analyzed in table 5.17 . The results support the thesis that party system structure influences electoral system choice: countries that introduce electoral reforms in favor of more proportionality have more fragmented party systems than countries with stable plurality systems. The difference between the two groups is almost significant at the 0.01 level. The effective number of parties was almost five in both Thailand and the Philippines when plurality systems were replaced with mixed-superposition systems in 1997 and 1998 respectively. Also New Zealand
had a more fragmented party system (effective number of parties: 3.53) than countries with plurality systems in general when a mixed-corrective system was adopted in 1993.

Table 5.17. Party system fragmentation in two samples of democracies with plurality systems. Mean values.

| Electoral system | Party system <br> fragmentation | N | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from plurality to mixed and PR | 3.66 | 14 | 1.41 |
| Plurality systems | 2.60 | 17 | 0.68 |

Note: Eta Squared .205, sig. . 011

The comparison of party system fragmentation in democracies that have changed from PR to mixed or plurality systems with PR systems in general does not support the assumption of party system structure affecting electoral system choice. Results in table 5.18 show that the level of party system fragmentation is higher in the category of electoral system change but not statistically significant. Only two countries - Greece and Italy - are represented in this category.

Table 5.18. Party system fragmentation in two samples of democracies with proportional systems. Mean values.

| Electoral system | Party system <br> fragmentation | N | Std. <br> deviation |
| :--- | ---: | ---: | ---: |
| Change from PR to plurality and mixed | 5.18 | 6 | 1.83 |
| Proportional systems | 4.11 | 44 | 1.75 |

Note: Eta Squared .039, sig. . 167

Totally eight comparisons have been conducted. The thesis of party system structure influencing electoral system choice is supported to a certain extent. Countries that replace plurality systems with mixed or proportional systems have more fragmented party systems than countries with plurality systems in general. The difference is significant among democracies only, which nonetheless must be considered as the more important sample. A relationship between party system fragmentation and electoral system choice does not exist when changes from PR to plurality systems are compared to proportional systems in general. The expanded
samples with changes to mixed systems confirm these tendencies. The analysis of change from PR to less proportional systems is marred by a small number of cases, which practically makes the comparison meaningless. Since these comparisons are based on cases of electoral system change, party system structure cannot be included in a multiple analysis. However, the analyses above confirm that the party system is not a main determinant of electoral system choice. Notwithstanding, it should be emphasized that the level of party system fragmentation may have some influence on changes from plurality to mixed and proportional systems.

### 5.4 Party System Transformation

The other actor-related variable within the rational perspective is party system transformation. There are totally 62 cases of party system transformation as prescribed in the theoretical part of the study. Note that countries, in which the former regime no longer exists at the political arena when the party system is transformed, are excluded. A proportional or mixed electoral system has been adopted simultaneously as the transformation of the party system took place, or between the transformation and the next elections, in the following countries:

Bulgaria (1990), Burkina Faso (1970), Burundi (1992), Cambodia (1993), Cameroon (1992), Chad (1991), Czechoslovakia (1989), East Germany (1990), Egypt (1981), Equatorial Guinea (1989), Estonia (1988), Georgia (1990), Guinea (1992), Guinea-Bissau (1991), Hungary (1989), Latvia (1988), Lithuania (1988), Moldavia (1993), Mozambique (1994), Niger (1993), Panama (1980), Romania (1990), Russia (1993), Sao Tome and Principe (1990), Senegal (1978), Seychelles (1992), Sierra Leone (1996), Slovenia (1991), Yugoslavia (1992)

The year of party system transformation is given in brackets. In the following countries, the party system transformation was not followed by electoral system reform as hypothezised:

Albania (1990), Algeria (1989), Armenia (1990), Azerbaijan (1990), Cape Verde (1990), Central African Republic (1993), Comoros (1990), Congo (-Brazzaville) (1991), Cote d'Ivoire (1990), Djibouti (1992), Gabon (1990), Ghana (1992), Jordan (1992), Kazakhstan (1994), Kenya (1991), Kyrgyzstan (1995), Lesotho (1993), Malawi (1993), Mauretania (1991), Mongolia (1990), Myanmar (1990),

Nepal (1991), Pakistan (1988), Poland (1989), Tajikistan (1991), Tanzania (1992), Thailand (1975), Togo (1994), Turkey (1946), Ukraine (1993), Yemen (1993), Zambia (1991), Zimbabwe (1990)

Almost half (29 of 62) of the countries that have experienced party system transformation have introduced electoral reforms as hypothesized. 19 countries have replaced majoritarian systems with proportional systems, whereas ten have adopted mixed electoral provisions. At a first glance, this might seem like a meagre result. However, one can hardly expect that every country holding multi-party elections for the first time also adopts a proportional (or a mixed) electoral system. There are, of course, several reasons for using a plurality or a majority system rather than a proportional or a mixed system.

Of the 268 electoral system choices in the study, 130 are cases of electoral system change. The number of changes from plurality/majority to mixed/proportional systems is 62 . Consequently, a large part of these changes have been preceded by a transformation from a one-party to a multi-party system. ${ }^{37}$ The frequence of electoral system change as a consequence of party system transformation must therefore be considered as rather high. In addition, nine of the 33 countries that did not introduce mixed or PR systems above introduced electoral reforms as hypothesized prior to the second parliamentary elections after the introduction of multi-party politics. ${ }^{38}$ Compared to the total share of changes from majoritarian to mixed or proportional systems ( 24 per cent), the share of similar reforms as a consequence of party system transformation ( 47 per cent) is also quite striking. Party system transformation has preceded 24 per cent ( 29 cases of 122) of all mixed and PR cases in the total population.

The listing of countries that have introduced multi-party politics also shows that party system transformation is a phenomenon of the 1990s. 47 of these 62 transformations have occurred between 1990 and 1996. Only four transformations have taken place before the 1980s. No difference in this respect is found between countries that have and countries that have not reformed their electoral systems as

[^33]a consequence of the party system transformation. Another striking pattern is that most of these transformations have taken place in Africa (31 cases) and in former Communist states (21 cases).

All in all, the findings indicate that there is a tendency for countries to introduce mixed or proportional systems when the ban on political parties is lifted and electoral competition is allowed. The analysis suggests that party system transformation bears relevance to explaining electoral system choice. However, this variable cannot be analyzed in a multivariate study, because the unit of analysis is party system transformation instead of electoral system choice. Consequently, only those cases of transformation that have resulted in major electoral reforms can be observed in comparison with other variables. Cases of party system transformation that have not caused changes in the electoral rules would lack values on the dependent variable.

Since the effect of party system transformation cannot be statistically compared with the effect of other variables, we cannot be sure that the association would remain in a control for other determinants. However, according to the theoretical arguments, party system transformation is a concrete explanation to the adoption of mixed or proportional systems. The decision to adopt a more inclusive electoral system is often a rational solution to both the former ruling party and the newcomers at the parliamentary arena.

To begin with, this variable is not overshadowed by any other independent variable within the rational perspective, because this chapter shows that associations between electoral system choice and other 'rational' variables are rather weak. With reference to the analyses in the next chapter, colonial legacy is not a relevant factor in explaining the pattern concerning party system transformation. As we shall see in section 6.2, the share of cases that qualifies as processes of regional diffusion is smaller than the share of electoral system change in the expected direction among cases of party system transformation. The number of cases of regional diffusion is, notwithstanding, much larger than the number of electoral system change as a consequence of party system transformation, which implies that all cases of electoral system change in this section could also be cases of regional diffusion. As mentioned, however, party system transformation is a concrete reason for adopting more proportional systems, whereas the observation
of processes of regional diffusion is based on some fulfilled criteria. It should be repeated that no actual process of diffusion is studied. Moreover, the temporal diffusion variable is of less dignity than several other variables; the fact that a particular trend is discernable does not explain the reason per se for the existence of a phenomenon. Variables within the institutional perspective are also considered as less important explanatory variables. We may hence conclude that party system transformation is a factor determining electoral system choice.

### 5.5 The Rational Perspective: Summary

Four variables within the rational perspective have been analyzed: ethnic/cultural diversity, population size, party system structure, and party system transformation. Concerning ethnic and cultural diversity, a pattern contrary to the expectations is observed. The number of proportional systems and AV, which are considered appropriate for divided societies, is very small among countries with a high degree of ethnic and cultural fragmentation. The frequency of systems mentioned above among countries with a low degree of fragmentation is, in contrast, disproportionately high. However, the pattern is rather weak and no significant relationship prevails. Considering the importance attached to electoral system design in divided societies, the small share of designed electoral systems in accordance with ethnic and other cleavages is astonishing.

As to population size, a bivariate association between small countries and plurality systems is observed. The relationship is stronger among democracies than in the total data sample. This finding contradicts the theoretical arguments put forward by several authors. However, there are obviously other explanations of the observed pattern, which implies that the correlation might be spurious. Another interesting finding is that despite the positive correlation between large population and PR, very large countries with more than 50 million people tend to use majoritarian or mixed systems. There seems to be a need of single-member districts in very large countries in order to maintain a link between voters and representatives.

The impact of party system structure on electoral system choice has been studied by comparing cases of electoral system change to samples of plurality systems and proportional systems respectively. The expected pattern according to the theory of party system structure and electoral system choice prevails among countries that
replace plurality systems with mixed or proportional systems. The discovered pattern is more evident and statistically significant in democracies. However, the analysis of electoral system changes in the opposite direction does not support the thesis of party systems affecting the choice of electoral systems. Consequently, on the basis of this study, the effect of party system structure on electoral system choice in general must be considered as rather limited. A larger dataset would probably have shed more light on the relationship between party system fragmentation and electoral system choice.

The other actor-related variable is party system transformation, i.e. transformation from absolute one-party rule to multi-party politics and competitive elections. 62 such cases are identified. In almost half of them, the expected electoral reforms have taken place. The share of electoral system change might be considered quite large for three reasons. First, almost half of all major electoral reforms towards mixed and proportional systems have been preceded by party system transformation. Second, the share of changes from majoritarian to PR/mixed systems in connection to or directly after party system transformation is practically twice as large as the share of similar reforms in the total population. Third, nearly one fourth of all mixed and PR choices in this study is associated with this variable. Party system transformation is, in other words, a factor that determines electoral system choice, thereby increasing the importance of the party system in general as well, although no striking pattern was observed with regard to the level of party system fragmentation.

## 6. CULTURE AND HISTORY: PATTERNS OF DIFFUSION

### 6.1 Colonial Diffusion

### 6.1.1 Colonial Diffusion - All Countries

Among patterns of diffusion, colonial diffusion is the first variable to be dealt with. Only the first choice in every former colony is regarded as a possible legacy from the colonial power. Of totally 268 cases, 138 are first choices of electoral systems, whereas 130 are cases of electoral system change. Of the 138 countries that have introduced electoral provisions for the first time, some are disqualified because they have never been colonies. Some others are disqualified because they have chosen their first electoral system more than ten years after the end of the colonial period. 105 countries meet the requirements of having been a colony during the relevant period, and having chosen an electoral system within ten years after receiving independence. 69 of these countries inherited the first electoral system from their colonial masters. Concerning the Somali Republic, both Britain and Italy are regarded as colonial powers, because the Somalian territory comprises the former British protectorate of Somaliland as well as the former Italianadministered UN Trust Territory. Vanuatu, which was jointly administered by Britain and France before proclaiming independence in 1980, is also related to two colonial powers. Cameroon was administered by both France and Britain, but only France is relevant to Cameroon's first choice of electoral system in 1960, because the British section joined the Republic of Cameroon not until 1961. ${ }^{39}$

Of the colonial powers during the second half of the twentieth century, Spain is omitted because its only colony, Equatorial Guinea, adopted its first electoral system in 1968 when Spain was a dictatorship. All the other colonial powers are listed in table 6.1 together with the number and share of colonies that inherited their first electoral system from the colonial power. The United Kingdom had the largest number of colonies, and almost 80 per cent of them inherited the plurality formula. Of the 35 former British colonies that adopted plurality systems, 26 chose SMP. BV was introduced in Cyprus, Fiji, Kuwait, Mauritius and Swaziland, whereas India, Jordan, Burma and Tuvalu adopted a mixture of SMP and BV. Ten

[^34]former British colonies did not inherit the British system. Kiribati preferred TBM, whereas the Maldives, Bahrain and Vanuatu adopted SNTV. Malta introduced STV, which nevertheless has its origin in the United Kingdom, but since STV is a proportional formula, I do not regard the choice of electoral system in independent Malta a legacy from the United Kingdom. Mixed electoral systems were adopted in Seychelles and Zimbabwe. Israel, Somalia and Guyana introduced list PR.

Table 6.1. Colonial powers, colonies and colonial legacy, all countries. Frequencies.

| Colonial power | Colonies <br> $(\mathbf{N})$ | Electoral system <br> inherited | $\mathbf{\%}$ | Electoral system <br> not inherited | \% |
| :--- | ---: | ---: | ---: | ---: | ---: |
| United Kingdom | 45 | 35 | 77.8 | 10 | 22.2 |
| France | 26 | 16 | 61.5 | 10 | 38.5 |
| Portugal | 2 | 0 | 0 | 2 | 100 |
| Netherlands | 2 | 1 | 50 | 1 | 50 |
| Belgium | 3 | 2 | 66.7 | 1 | 33.3 |
| Italy | 2 | 1 | 50 | 1 | 50 |
| United States | 4 | 4 | 100 | 0 | 0 |
| Australia | 2 | 1 | 50 | 1 | 50 |
| New Zealand | 1 | 1 | 100 | 0 | 0 |
| South Africa | 1 | 0 | 0 | 1 | 100 |
| Indonesia | 1 | 1 | 100 | 0 | 0 |
| Soviet Union | 14 | 6 | 42.9 | 8 | 57.1 |
| Yugoslavia | 4 | 1 | 25 | 3 | 75 |
|  |  |  |  | 38 | 35.5 |
| Total N |  | 64.5 |  | 38 |  |

16 of 26 former French colonies adopted BV or TBM after this formula was introduced for French elections in 1958. Since no former French colony adopted list PR or mixed systems between 1945 and 1958, only BV and TBM have been inherited from France. Merely one former colony, Comoros, inherited the latter mentioned system (in 1978) from France. Syria adopted TBM in 1947 but France used list PR at that time. Some countries (Cambodia, Laos, South Vietnam and Togo) preferred SMP, Cameroon and Laos introduced SMP-BV, and Madagascar adopted a mixed electoral system. Morocco was the only former French colony that introduced a proportional system (list PR). As noted, Vanuatu adopted SNTV.

The only Portuguese colonies that qualify for this sample - Cape Verde and Guinea-Bissau - chose BV instead of list PR, which Portugal had recently adopted. The other Portuguese colonies in Africa - Mozambique, Angola and Sao Tome \&

Principe - did not adopt electoral provisions until the 1990s. Indonesia inherited list PR from the Netherlands; Suriname, however, preferred a mixed electoral system. All colonies of the United States, i.e. the Philippines, the Federated States of Micronesia, Marshall Islands and Belau, inherited the plurality formula when independence was attained. The Americans administered their colonies much in the same way as the British, which probably explains the pattern. Western Samoa inherited the plurality method from New Zealand. Belgium transferred list PR to Congo (-Kinshasa) and Rwanda - Burundi, the third Belgian colony, adopted SMP. Somalia inherited list PR from Italy, whereas Libya prefered SMP. Nauru inherited AV from Australia - Papua New Guinea, however, rejected AV in favor of SMP when independence was declared. Namibia, the only colony of South Africa, adopted list PR a few years before South Africa introduced the same system. East Timor, the youngest independent country of the world, adopted the same electoral system as Indonesia applies, i.e. list PR.

Of the former Soviet states, more than half chose another electoral system than TBM. Notwithstanding, it is noteworthy that Belarus, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine and Uzbekistan retained the old electoral system after independence was attained. Only one of the countries that declared independence from the Federal Republic of Yugoslavia in the 1990s, namely BosniaHerzegovina, adopted the same electoral system (in 1996) that simultaneously existed in Yugoslavia, i.e. list PR.

In table 6.2, the correlation between electoral system choice on the one hand and British, French and Soviet legacy on the other is separately given. These results must be interpreted with cautiousness, because the variables are categorical. Nevertheless, it provides an idea of what to expect in the multivariate analyses. ${ }^{40}$ Despite observing only first choices of electoral systems in the analysis above, the total population is now paid attention to. All former British colonies (and French as well as Soviet colonies separately) that adopted their first electoral systems within ten years after the end of the colonial rule are compared to all other cases. A fourth variable that regards all former colonies is also included.

[^35]Table 6.2. Colonial legacy and electoral system choice. Correlation analysis, Spearman's rho.

| Independent variables | Electoral system choice |
| :--- | :---: |
| British colonial legacy | $.354^{*}$ |
| French colonial legacy | $.284^{* *}$ |
| Soviet colonial legacy | -.073 |
| Colonial legacy, all cases | $.415^{* *}$ |
| $\mathbf{N}$ | 268 |

Note: ** = significant at the 0.01 level

Both British and French colonial legacy correlate positively with electoral system choice, indicating that the former colonies are associated with majoritarian systems, plurality in particular. The coefficient for French legacy is not much lower than that of British legacy, although the importance of British legacy is much more emphasized in the literature. Soviet legacy does not correlate with the dependent variable. The variable that observes all former colonies produces the strongest correlation. This result does not come as a surprise, because two thirds of all cases are either British or French colonies. Accordingly, the bivariate analyses suggest that there is a relationship between both British and French legacy on the one hand and electoral system choice (majoritarian systems) on the other. A discussion on which variables should be included in the multivariate analyses is provided in chapter 8.

### 6.1.2 Colonial Diffusion - Democratic Countries

In this section, colonial legacy in democratic countries is analyzed. Of the 105 countries in the previous sample, only 34 were democratic when they adopted their first electoral systems as independent nations. 23 of these have inherited their electoral systems from the colonial powers, i.e. approximately the same share of inherited systems as in the previous sample of both democracies and nondemocracies.

The number of former colonies with regard to each colonial power is given in table 6.3. Roughly two thirds of all democratic cases are former British colonies. ${ }^{41}$ All four American colonies were democratic when independence was declared. The

[^36]former French colonies show the opposite pattern: only two (Gabon and Vanuatu) of the 26 countries were democratic when the first electoral system was chosen. Neither were the former colonies of Portugal, Belgium, Yugoslavia, Indonesia and New Zealand democratic when electoral provisions were adopted. All but two (Gabon and Nauru) of the inherited electoral systems among democracies originate from the United Kingdom or the United States.

Table 6.3. Colonial powers, colonies and colonial legacy in democracies. Frequencies.

| Colonial power | Colonies (N) | Electoral system <br> inherited | $\mathbf{\%}$ | Electoral system <br> not inherited | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| United Kingdom | 23 | 18 | 78.3 | 5 | 21.7 |
| France | 1 | 50 | 1 | 50 |  |
| Netherlands | 2 | 0 | 0 | 1 | 100 |
| United States | 4 | 4 | 100 | 0 | 0 |
| Australia | 1 | 50 | 1 | 50 |  |
| Soviet Union | 2 | 0 | 0 | 3 | 100 |
| Total N | 3 |  |  |  |  |

Table 6.4. Colonial legacy and electoral system choice in democracies. Correlation analysis, Spearman's rho.

| Independent variable | Electoral system choice |
| :--- | :---: |
| British colonial legacy | $.475^{* *}$ |
| Colonial legacy, all cases | .546 |
|  |  |
| $\mathbf{N}$ | 63 |

Note: ** $=$ significant at the 0.01 level

The correlation between British colonial legacy and electoral system choice, given in table 6.4, is even stronger among democracies than in the total data sample. This value is again exceeded by the correlation between all former colonies and the dependent variable. It may be repeated that correlation analysis is a rather unwieldy technique for studying relationships between categorical variables. Notwithstanding, on the basis of these initial analyses, British colonial legacy is a central determinant of electoral system choice. This conclusion applies to the total population as well as to democracies. French colonial legacy seems to have some
impact on the dependent variable when all cases of electoral system choice are studied. In the democratic sample, however, a French legacy does not exist.

### 6.2 Regional Diffusion

Contrary to the previous section on colonial diffusion, the total data sample is included in the descriptive analysis of regional diffusion. Every choice of electoral system is regarded as either diffusion from other influential countries in the same region or a decision irrelevant of regional impact. The frequency of electoral systems as a consequence of diffusion is presented in table 6.5 . Approximately 35 per cent of all cases meet the criteria of regional diffusion. If all 69 cases of colonial legacy are excluded, the share of regional diffusion is nearly half of the total population ( 47.7 per cent).

Table 6.5. Electoral systems and diffusion by continent. Frequencies.

| Electoral system choice | $\mathbf{N}$ | Regional <br> diffusion (N) | $\mathbf{\%}$ | No regional <br> diffusion (N) | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Europe | 54 | 31 | 57.4 | 23 | 42.6 |
| America | 40 | 13 | 32.5 | 27 | 67.5 |
| Africa | 93 | 25 | 26.9 | 68 | 73.1 |
| Asia | 67 | 24 | 35.8 | 43 | 64.2 |
| South Pacific | 14 | 2 | 14.3 | 12 | 85.7 |
| Total N | 268 | 35.4 | 173 | 64.6 |  |

In order to provide some more information, the frequency of electoral system choice in each continent is also presented. Only in Europe is a majority of all choices associated with regional diffusion. Approximately one third in America and Asia, one fourth in Africa, and merely one of seven electoral system choices in the South Pacific are identified as processes of diffusion. However, it should be observed that most countries in Africa and the South Pacific have been colonies, and many of them have inherited their electoral systems from the former colonial powers.

There is a striking pattern with regard to the adoption of mixed electoral systems in former Communist countries. Hungary was the first country in Eastern Europe that introduced a mixed system, super-mixed in 1989. Lithuania, Croatia and Georgia
adopted mixed-superposition in 1992, followed by Russia in 1993. Two years later, Armenia and Azerbaijan joined the company of former Soviet states applying mixed systems. Kazakhstan, Kyrgyzstan and Tajikistan replaced their TBMformulas with mixed-superposition in 1999. The same system has also been applied in Ukraine since 1998, in Bulgaria 1990, in Yugoslavia 1992, and in Macedonia 1998. As observed in the previous section, six former Soviet states of 14 adopted the Soviet TBM-formula as independent states. A decade later, nine of these 14 countries applied mixed electoral systems.

Table 6.6. Electoral systems and diffusion by continent, democracies. Frequencies.

| Electoral system choice | $\mathbf{N}$ | Regional <br> diffusion (N) | $\mathbf{\%}$ | No regional <br> diffusion (N) | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Europe | 22 | 9 | 40.9 | 13 | 59.1 |
| America | 15 | 2 | 13.3 | 13 | 86.7 |
| Africa | 3 | 0 | 0 | 3 | 100 |
| Asia | 11 | 2 | 18.2 | 81.8 |  |
| South Pacific | 12 | 1 | 8.3 | 11 | 91.7 |
| Total N | 63 | 14 | 22.2 | 49 | 77.8 |

In table 6.6, democratic cases of electoral system choice are included. The share of electoral systems associated with regional diffusion among democracies is 22 per cent. If inherited systems are excluded, the share increases to 36 per cent. The pattern among democracies resembles that of the total population: processes of regional diffusion are most frequent in Europe and least frequent in Africa and the South Pacific.

In 2002, Papua New Guinea adopted AV, which is used in Australian parliamentary elections to the lower house. When Lebanon adopted BV in 1953, the same system also existed in Turkey. Japan is regarded as a model to the Philippines, which introduced mixed-superposition in 1998. When Guyana proclaimed independence from the United Kingdom in 1966, it adopted the most common system in South America; i.e. list PR. Bolivia's choice of a mixedcorrective system in 1997 is seen as inspired by the Venezuelan electoral reform in 1993. Processes of regional diffusion are observed in the following European countries: Italy (1953), Greece (1958), Iceland (1959), Cyprus (1981), Bulgaria (1991), Estonia (1992), Latvia (1993), the Czech Republic (1993), and Slovakia
(1993). All these countries adopted list PR except for Italy, which introduced a mixed-conditional system for one election only.

In the multiple analysis, regional diffusion is dealt with as a dummy, the value 1 indicating that regional diffusion has taken place and 0 for all other cases. The strength of this variable is compared to other explanatory variables with regard to the dependent variable. By correlating this variable with electoral system choice, the following coefficients are received: 0.242 in the total sample and 0.479 in the democratic sample. Both associations are significant at the 0.01 level, suggesting that mixed electoral systems and especially proportional systems are related to regional diffusion.

### 6.3 Temporal Diffusion

### 6.3.1 Temporal Diffusion - All Countries

The third variable within the cultural and historical perspective is temporal diffusion. An introductory analysis of all cases (and 'democratic' cases separately) was conducted in section 2.5 . In this section, the frequency of first choices of electoral systems as well as cases of electoral system change is separately observed. In addition, chi-square analysis on the basis of figure 2.1 and 2.2 in section 2.5 is provided. The importance of other determinants during different periods is finally analyzed.

Figure 6.1 shows frequencies by year of all 138 first electoral system choices, which to a great extent coincides with the number of countries that have declared independence each year. A large share of electoral systems was adopted in the 1960s, culminating in 1960 with 15 cases. During the 1980s, only six initial choices were made, because the number of independent nations increased only modestly that decade. The breakdown of the Soviet Union in the early 1990s resulted in several new independent countries and, as a consequence, a lot of electoral system choices.


Figure 6.1. Frequencies of first electoral system choice 1945-2003.
In figure 6.2, cases of electoral system reform are illustrated. Hence, this comparison is not affected by the number of newly independent countries each year. Electoral reform did not become a frequent phenomenon until 1990 when eight changes were seen. Half of all 130 cases of electoral system change have taken place between 1990 and 2003. The number of electoral reforms peaked in 1993 when twelve changes were made. Most often, however, the number of changes has been one or two per year.


Figure 6.2. Frequencies of electoral system change 1945-2003.

On the basis of figure 2.1 in section 2.5 , which shows the frequencies by year of all cases of electoral system choice, four specific periods are distinguished: 19451955, 1956-1969, 1970-1989, and 1990-2003. At the end of each period, the frequency of electoral system choice has been low. In the following, the frequencies of electoral systems in each of these periods are presented. The total number of electoral system choice in each category is $36,73,63$ and 96 respectively.

Table 6.7. Temporal diffusion, four periods. Crosstabulation, Pearson Chi-Square.

| Time period | Plurality <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Majority <br> $(\mathbf{N})$ | $\mathbf{\%}$ | PR <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 9 4 5 - 1 9 5 5}$ | 17 | 47.2 | 5 | 13.9 | 10 | 27.8 | 4 | 11.1 |
| $\mathbf{1 9 5 6 - 1 9 6 9}$ | 45 | 61.6 | 6 | 8.2 | 16 | 21.9 | 6 | 8.2 |
| $\mathbf{1 9 7 0 - 1 9 8 9}$ | 35 | 55.6 | 8 | 12.7 | 10 | 15.9 | 10 | 15.9 |
| $\mathbf{1 9 9 0 - 2 0 0 3}$ | 9 | 9.4 | 21 | 21.9 | 34 | 35.4 | 32 | 33.3 |
|  |  |  |  |  |  |  |  |  |
| Total $\mathbf{N}$ | 106 | 39.6 | 40 | 14.9 | 70 | 26.1 | 52 | 19.4 |

Note: Chi-square value 63.495 , sig. . 000

Some distinct tendencies are discernable in table 6.7. Almost half of all electoral system choices during the first period were plurality systems. During the second period (1956-1969) when most of the African countries became independent, plurality constituted more than 60 per cent of all adopted electoral systems. The frequency of plurality system choices remained high also in the 1970s and the 1980s, but decreased to merely one tenth of all choices during the fourth period. The number of majority system choices since 1990, in contrast, is twice as high as plurality ones. Proportional systems have gained renewed popularity since 1990 , representing more than one third of all adopted electoral systems. After having been rather unpopular before 1990, mixed electoral systems represent one third of all choices during the fourth period. There have, thus, been some drastic changes as to the popularity of different electoral systems during the postwar era. The chisquare value is rather large and significant at the 0.001 level.

### 6.3.2 Temporal Diffusion - Democratic Countries

In this section, the same procedure as above is carried out with choices made under democratic circumstances. There are 36 first choices and 27 cases of electoral system change. First choices of electoral systems among democracies are illustrated in figure 6.3. Three distinct epochs appear. The first one ranges from 1958 to 1970, when ten democracies chose electoral systems for the first time as independent countries. During the second period, 1974-1983, 15 new cases are observed. Between 1984 and 1990, no first choices of electoral systems in democracies took place. A third, short period is observed from 1991 to 1994, when eight systems were chosen. It may also be pointed out that only the Philippines, Israel and Sri Lanka chose electoral systems for the first time before 1958.


Figure 6.3. Frequencies of first electoral system choice in democracies 1945-2003.

Electoral system change among democracies is presented in figure 6.4. Only France had implemented a major electoral reform before 1951. A period of electoral system change took place between 1951 and 1961, ten such cases being observed. Seven of these electoral reforms occurred in France, Italy and Greece. Iceland and Turkey introduced PR reforms, whereas Lebanon replaced TBM with BV. Thereafter, a 17 year-period of no major reforms in democracies followed. Sri Lanka and Cyprus replaced plurality systems with list PR in 1978 and 1981 respectively. At the second half of the 1980s, France started a period of electoral system reforms. Between 1991 and 2002, eleven democratic countries changed
their electoral systems. Bulgaria adopted list PR in 1991. Italy and Venezuela introduced mixed-corrective systems in 1993 after having used list PR. Mixed electoral systems were likewise chosen in Japan, New Zealand, Bolivia, Thailand, Madagascar, the Philippines and Monaco. The Philippines resumed SMP in 2001 after merely one election under mixed-superposition. Papua New Guinea reintroduced AV in 2002 after having used SMP since 1975.


Figure 6.4. Frequencies of electoral system change in democracies 1945-2003.
On the basis of figure 2.2 in section 2.5, which illustrates all cases of electoral system choice in democracies, four specific periods are distinguished: 1945-1956, 1958-1970, 1974-1988, and 1991-2003. Characteristically of all four periods is that electoral systems have been scarcely adopted at the end of the period. The frequency of electoral systems in each of these periods is presented and analyzed by means of a chi-square test in table 6.8. The total number of electoral system choice under democratic circumstances in each category is $10,14,19$ and 20 respectively.

As in the corresponding table (6.7) with all cases included, the extent to which a certain electoral system has been chosen during different periods varies considerably. A majority of all chosen systems during the second and the third period are plurality systems. Since 1991, however, plurality systems constitute only one fifth of all choices. Majority systems have been scarcely adopted during the entire postwar era. Proportional systems were popular during the first and the
second period, and enjoyed some renewed popularity in the 1990s after having been scarcely adopted in the 1970s and 1980s. Although mixed systems enjoyed some popularity during the first era, no democratic country adopted such a system in the second period. After Suriname and Seychelles chose mixed systems in the 1970s, another ten democratic countries adopted mixed systems during the fourth epoch. On the whole, plurality systems have lost popularity during the fourth period at the expense of foremost mixed electoral systems. The chi-square value is considerably smaller among democracies than in the total data sample, but nevertheless significant at the 0.05 level.

Table 6.8. Temporal diffusion in democracies, four periods. Crosstabulation, Pearson ChiSquare.

| Time period | Plurality <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Majority <br> $(\mathbf{N})$ | $\mathbf{\%}$ | PR <br> $(\mathbf{N})$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 9 4 5 - 1 9 5 6}$ | 4 | 40.0 | 0 | 0 | 3 | 30.0 | 3 | 30.0 |
| $\mathbf{1 9 5 8 - 1 9 7 0}$ | 7 | 50.0 | 2 | 14.3 | 5 | 35.7 | 0 | 0 |
| $\mathbf{1 9 7 4 - 1 9 8 8}$ | 12 | 63.2 | 2 | 10.5 | 3 | 15.8 | 2 | 10.5 |
| $\mathbf{1 9 9 1 - 2 0 0 3}$ | 4 | 20.0 | 1 | 5.0 | 5 | 25.0 | 10 | 50.0 |
|  |  |  |  |  |  |  |  |  |
| Total N | 27 | 42.9 | 5 | 7.9 | 16 | 25.4 | 15 | 23.8 |

Note: Chi-square value 18.360 , sig. . 031

### 6.3.3 Temporal Diffusion - On the Correlates

As mentioned earlier, some variables are of less dignity than other variables in explaining why countries choose specific electoral systems, temporal diffusion being one of them. In this section, the relevance of the explanatory variables during each of the four periods is explored. The number of electoral system choice in each period is $36,73,63$ and 106 respectively. The corresponding figures are $10,14,19$ and 20 when democracies are separately observed. Because of rather small samples, the analyses are descriptive and not presented in table format. Accordingly, no controlling for competing explanations is undertaken.

It should be observed that the analysis in this section represents an excursion from the general logic of the study. In addition, the discussion anticipates the multiple analysis to some extent. However, because of the modest role of temporal diffusion
as a general determinant of institutional choices, it seems appropriate to probe into some of its correlates more closely. It is reasonable to assume that the importance of different explanatory factors varies over time. Consequently, the analysis may provide some important, additional information on how electoral systems have been chosen in the postwar era. Furthermore, it might facilitate, or contribute to the task of predicting future electoral system choices.

### 6.3.3.1 All Countries

To begin with, patterns during the first period - consisting of 36 cases - are analyzed. Plurality systems were most frequent between 1945 and 1955, 17 cases being observed, followed by ten proportional systems. The number of adopted majority and mixed systems were five and four respectively. In comparison with the whole time period 1945-2003, plurality systems are over-represented and mixed systems are under-represented. No pattern emerges concerning ethnic and cultural diversity on the one hand and electoral system choice on the other. By and large, the same conclusion applies to population size: the proportions of plurality and proportional systems are rather similar among small as well as large countries. It should be pointed out that three of totally four mixed systems were adopted in countries with more than 40 million people (France, Italy and West Germany). The mixed systems (conditional) in France and Italy did not, however, apply singlemember districts, which constitute a rational solution for large countries. Party system structure is not relevant to electoral system choice in the total data sample, and few party system transformations took place during the first two periods.

Several British and French colonies in Asia were granted independence between 1945 and 1955. India, Sri Lanka, Burma, Israel and Jordan became independent from the United Kingdom, whereas Vietnam, Cambodia, Laos and Syria became independent from France. In addition, the Philippines, Indonesia and Libya were granted independence from their colonial powers respectively. Seven of these twelve countries inherited their electoral systems from the former colonial power Cambodia, Laos, Syria, Israel and Libya preferred other systems. Accordingly, colonial legacy is not a very relevant factor in explaining electoral system choice during the first period. Twelve of 36 cases qualify as processes of regional diffusion, i.e. close to the share ( 35 per cent) of all 268 cases. Only four of the 17 plurality systems are connected to regional diffusion, whereas half of the
proportional systems have been imitated. Considering that seven electoral systems were inherited from former colonial powers, approximately half of all cases during the first period are explained by colonial and regional diffusion.

As for the institutional perspective, form of government is not studied in this context, because it concerns democracies only. No pattern is discernable with regard to territorial organization and electoral system choice. Five cases of federalism are observed: Brazil and Venezuela adopted proportional systems, West Germany introduced a mixed system, and India as well as Libya preferred plurality systems. Concerning chamber structure, however, some differences appear. The combination of two-chambers and plurality was the most common during the analyzed period, ten cases belonging to this category. It should be observed that a possible influence of the British parliamentary system does not explain this pattern, because the decolonization process had only started. Seven of those ten bicameral countries that adopted plurality systems had not been British colonies. In contrast, all majority systems were adopted in unicameral countries (Syria, North Korea, Mongolia, Egypt and Iraq). Mixed systems were adopted in foremost bicameral countries, whereas proportional systems were rather evenly divided between oneand two-chamber entities. Despite these tendencies, the relationship is not significant largely because of the small sample.

The second period consisting of 73 cases of electoral system choice began in 1956 and ended in 1969. A strong dominance of plurality systems characterizes this epoch, the number being 45 , compared to six majority systems, 16 proportional systems, and six mixed systems. The category of mixed systems is the most underrepresented in comparison with the frequencies of other systems between 1945 and 2003. There is a strong relationship between a high level of cultural fragmentation and electoral systems inappropriate for plural societies. Half of all cases during the second period belong to the category with a high level of fragmentation and other electoral systems than list PR, STV and AV. A great majority of those countries that are characterized by medium-sized fragmentation also adopted inappropriate systems. However, among countries with low or bipolar levels of fragmentation, proportional systems (and AV) are more frequent than other systems. The chisquare value is significant at the 0.001 level.

The average population size among countries that chose electoral systems between 1956 and 1969 is rather small. 19 countries of which all but Iceland adopted electoral systems for the first time had less than one million people. Another 40 cases are characterized by a population size between one and ten millions. The share of proportional systems is appreciably larger among countries with more than ten million citizens than among smaller countries, but plurality systems are, notwithstanding, most frequent in all categories. Party system transformation is not relevant to electoral system choice during the second period. The most striking feature concerning the rational perspective during the analyzed period is that almost every country with a high level of cultural fragmentation adopted an inappropriate electoral system. However, explanations of this pattern are to be found elsewhere.

Two thirds of all electoral system choices (49 of 73) between 1956 and 1969 were implemented in newly independent former colonies. 24 countries became independent from the United Kingdom and 19 declared independence from France. 39 of the former colonies inherited their electoral system from the colonial powers. In addition to 20 cases of British legacy and 13 cases of French legacy, three systems were inherited from Belgium, and one from Italy, New Zealand and Australia each. The association between colonial legacy and electoral system choice also explains the association between cultural diversity and electoral system choice: former colonies are considerably more fragmented than other countries during the analyzed period, the correlation coefficient between former colonies and cultural diversity being 0.485 . 19 cases of electoral system choice are related to regional diffusion, which leaves only 15 cases not comprised by colonial or regional diffusion during the second period. The category of regional diffusion consists of eight plurality systems and eight proportional systems each. No mixed system was introduced as a consequence of regional diffusion. Of those cases not explained by colonial legacy or regional influence, two thirds are either mixed or proportional systems, which is remarkable during an epoch dominated by the adoption of plurality systems.

Unitary arrangements prevailed among countries (67 cases of 73) that adopted electoral systems during the second period. Of the federal states, Malaysia, Nigeria, Equatorial Guinea and Kenya chose SMP, Mexico adopted mixedcorrective, and Congo (-Kinshasa) introduced list PR. Neither does any pattern
emerge when electoral systems are compared with regard to chamber structure. The combination of unicameralism and plurality is very frequent, which comes as no surprise given that more than two thirds of all countries that adopted electoral systems during this period had one-chamber legislatures.

The third period (from 1970 to 1989) consists of 63 cases. Plurality systems were still prevailing, whereas the other systems were under-represented, particularly PR, in comparison with the dispersion of systems between 1945 and 2003. The number of adopted plurality, majority, proportional, and mixed systems during the third period are $35,8,10$, and 10 respectively. There is no pattern whatsoever concerning ethnic/cultural diversity and electoral system choice. In contrast, population size correlates positively with the dependent variable - plurality is associated with smallness. Population size is below one million in 23 cases, between one and ten million in 20 cases, and larger than ten million in likewise 20 cases. 17 of the microstates adopted plurality systems, whereas the number of plurality systems in the other two categories is nine each. The frequency of other systems only marginally increases when population size increases. Plurality systems are, in other words, frequent in all categories of population size, but exceedingly popular among small countries. Again, diffusion may explain the observed pattern. Nine party system transformations as previously defined took place between 1970 and 1989. Seven of these resulted in the adoption of mixed or proportional systems.

22 former colonies declared independence during the third period - 15 of these countries had been under British rule. 13 former colonies inherited their electoral systems from the colonial powers. The British exported their electoral system to eleven newly independent countries. All countries that inherited their electoral systems between 1970 and 1989 are microstates; thus, explaining the relationship between plurality and smallness. 19 electoral system choices are processes of regional diffusion, which constitutes a somewhat smaller share compared to the total data sample. Only five cases are PR, whereas all the others are plurality systems. The chi-square test returns a significant relationship at the 0.01 level between regional diffusion and electoral system choice. All in all, half of all cases during the third epoch of electoral system choice are related to colonial or regional diffusion.

Only two federal states chose electoral systems between 1970 and 1989: Pakistan adopted SMP and the Comoros introduced TBM. Three countries of four that adopted electoral systems had one-chamber parliaments. The frequency of different electoral systems with regard to one- and two-chamber systems is approximately the same as in the total sample during the analyzed period, i.e. no differences appear with regard to chamber structure.

The fourth period (1990-2003) consists of 96 cases, of which nine are plurality, 21 majority, 34 proportional, and 32 mixed systems. Thus, plurality systems are under-represented, whereas proportional systems and particularly mixed systems are over-represented in comparison with the total population. No association exists between ethnic and cultural diversity on the one hand and electoral system choice on the other. The share of electoral systems at different levels of fragmentation corresponds, by and large, to those in the whole data sample. Neither is population size related to the dependent variable to any greater extent. In accordance with the theoretical arguments by Rokkan (1970), Katzenstein (1985) and Rogowski (1987), countries that have chosen proportional systems are certainly smaller than countries with majoritarian systems on average. However, the differences are rather small, the mean of proportional systems being 9.8 million, plurality systems 14.6 million, and majority systems 11.3 million people. Countries that have adopted mixed systems return the highest mean value, 21.8 million people. This finding supports the thesis that large countries need small (i.e. single-member) districts in order to maintain geographical accountability. A large number of party system transformations took place during the fourth period. Of totally 54 transformations, 24 resulted in the adoption of mixed or proportional systems. Consequently, party system transformation is an important factor in explaining electoral system choice during the fourth epoch.

Contrary to earlier periods, colonial legacy has not been a prominent factor since 1990. 24 countries achieved independence from foreign rule during the analyzed period, eleven of which inherited their electoral systems. Six electoral systems were inherited from the Soviet Union, three from the United States, and one from Yugoslavia and Indonesia each. 45 of 96 cases meet the criteria of regional diffusion, i.e. almost 50 per cent of the sample. An overwhelming majority of the regionally influenced cases are mixed (15) and proportional (22) systems. Only one plurality system is a consequence of regional diffusion. By using a chi-square
test, the association between regional diffusion and electoral system choice during the fourth period is significant at the 0.05 level, indicating that the adoption of mixed systems and especially proportional systems are results of regional diffusion.

Seven federal countries adopted electoral systems during the fourth period. No particular pattern is observed. The same conclusion applies to electoral system choice with respect to chamber structure. 58 cases are related to unicameral systems, whereas 38 cases are related to bicameral systems. The frequency of unicameralism is higher in all categories of electoral systems.

To sum up, colonial legacy and regional influence explain approximately half of all electoral system choices during the first period. Seven electoral systems were inherited, whereas twelve electoral systems were the result of imitating neighboring countries. Especially proportional systems were subjected to regional diffusion. The combination of bicameralism and either plurality or mixed systems was very common at the middle of the twentieth century. All majority systems, on the other hand, were adopted in unicameral countries. The rational perspective does not explain electoral system choice during the first two epochs. Concerning cultural diversity, however, there is a clear pattern during the second period: almost all countries characterized by medium-sized or high level of fragmentation adopted inappropriate electoral systems. However, colonial legacy explains this relationship. More than half of all systems were inherited from the colonial powers, mainly Britain and France. Another 19 choices were associated with regional diffusion. Almost every adopted plurality system was a consequence of either colonial or regional diffusion.

Party system transformation preceded the adoption of mixed or proportional systems in seven cases during the third period. As for the rest, diffusion was the prominent factor. 13 electoral systems were inherited from the colonial powers, mostly the United Kingdom. 19 choices, foremost plurality systems, were influenced by neighboring countries. The rational perspective became a relevant explanatory model during the fourth period. Mixed systems were adopted primarily in large countries, the use of single-member districts being regarded as the crucial factor. 24 party system transformations were succeeded by changes from majoritarian to mixed or proportional systems. Colonial legacy did no longer play
any major role. Regional diffusion, in contrast, was a major determinant, characterizing almost half of all choices. Most of the imitated systems were nonmajoritarian. The institutional perspective does not explain patterns of electoral system choice on the basis of these analyses.

### 6.3.3.2 Democratic Countries

In this section, a similar analysis as above is conducted with democratic cases only. The first period, ranging from 1945 to 1956 , consists of ten cases: four plurality systems, three proportional systems, and likewise three mixed systems. All countries that adopted proportional or mixed systems, except for Israel, were ethnically, linguistically or religiously homogeneous, whereas all countries that introduced plurality systems, except for Greece, were culturally heterogeneous. Thus, cultural features were not taken into consideration when electoral systems were chosen. Those countries that adopted plurality systems were much smaller than the others, the average population size being 8.7 million people compared with 30.5 millions among countries that chose PR and 32.3 millions among countries that introduced mixed systems. These results contradict the theoretical arguments put forward by Rokkan (1970) and others. In the last section, I concluded that the relationship between smallness and plurality is a consequence of colonial legacy. In this sample, however, the connection between population size and electoral system choice is only partly affected by colonial heritage. The Philippines and Sri Lanka inherited SMP from the United States and the United Kingdom respectively, but Israel, formerly under British administration, preferred list PR. Deviating level of party system fragmentation did not exist before the changes of electoral systems in Greece and Italy. Party system transformation is not relevant to explaining electoral system choice in democracies, because cases of transformation are per definition non-democratic.

As mentioned above, colonial legacy did not play any major role among democracies during the first period. Neither was regional diffusion of any greater importance: only two cases of ten meet the criteria of regional diffusion. Accordingly, patterns of diffusion apply to four cases of electoral system choice. None of the variables of the institutional perspective produces any pattern in connection to the dependent variable.

Half of the 14 cases during the second period, ranging from 1958 to 1970, are plurality systems. Nauru and France adopted majority systems, whereas the remaining five cases are proportional systems. All these systems are slightly overrepresented at the expense of mixed systems in comparison with the frequencies in the total sample. As for cultural diversity, five cases belong to the category of a high level of fragmentation combined with plurality systems, whereas four cases combine a low level of fragmentation with proportional systems. Of the culturally diverse countries, only Nauru and Guyana adopted appropriate electoral systems. Those countries that adopted plurality systems were considerably smaller than other countries. A majority of the democratic countries that chose electoral systems during the second epoch were former colonies, which might explain these patterns. Party system structure did not influence any electoral system change between 1958 and 1970.

Of those ten countries that recently had been under foreign rule, only Malta and Guyana preferred other systems than that of the colonial power. Six countries inherited the British electoral system. Three cases qualify as processes of regional diffusion: Greece, Iceland and Guyana adopted list PR that was frequently used in Western Europe and South America. Consequently, diffusion is related to eleven of totally 14 cases.

Despite some discernable tendencies, no definitive pattern emerges concerning form of government and electoral system choice. The sample consists of two presidential regimes: both Cyprus and Gabon adopted plurality systems. Two of four semi-presidential regimes, France and Nauru, introduced majority systems, whereas the other two, Iceland and Guyana, chose proportional systems. The parliamentary regimes in the sample are divided between five plurality systems and three proportional systems. All countries that combined plurality with parliamentarism were former British colonies. Malaysia is the only federal country in this sample. As to chamber structure, the following pattern is observed: a majority of the unicameral countries adopted proportional systems, whereas most bicameral entities introduced plurality systems. However, all countries that combined plurality systems with two-chamber legislatures (Malaysia, Jamaica, Trinidad \& Tobago, Fiji and Barbados) were former British colonies.

Plurality systems dominate the third period, ranging from 1974 to 1988, at the expense of proportional and mixed systems. Of the 19 cases, twelve are plurality, two are majority, three are proportional, and two are mixed systems. The frequency of culturally diverse countries with plurality systems is high, whereas only two countries - Sri Lanka in 1978 and France in 1986 - with medium-sized or high level of fragmentation adopted PR. Almost every country in the sample had less than one million citizens when electoral systems were chosen. Party system structure is not relevant to electoral system choice in this sample.

Once again, colonial legacy explains the frequent adoption of plurality systems in culturally diverse societies. As many as 13 of these 18 countries (France changed their electoral system twice during the third period) are former British colonies. Only Seychelles, Kiribati and Vanuatu chose electoral systems not influenced by the United Kingdom. Regional diffusion was not relevant to electoral system choice between 1974 and 1988. Only Cyprus' electoral system change from SMP to list PR in 1981 fulfils the criteria of regional diffusion.

Concerning form of government, there is a very clear pattern: all parliamentary countries introduced plurality systems, whereas all other forms of government are combined with other systems. However, all parliamentary countries with plurality systems except for Papua New Guinea are former British colonies, which explains the relationship. No federal system is represented in this sample of electoral system choice. Seven cases are bicameral; two of which are related to the French electoral reforms in 1986 and 1988. The remaining five belong to the British Commonwealth. Surprisingly enough, eight of 13 former British colonies preferred unicameral assemblies.

The fourth period (from 1991 to 2003) consists of 20 cases: four plurality systems, one majority system, five proportional, and ten mixed systems. Mixed systems are over-represented at the expense of majoritarian systems in comparison with the democratic population as a whole. Concerning ethnic and cultural fragmentation, no pattern with regard to electoral system choice appears. Inappropriate choices in heterogeneous countries are still common. However, examples of the opposite are also present: the highly fragmented Papua New Guinea, for instance, adopted AV, which is regarded a conflict-mitigating system. Population size varies considerably in the four categories of electoral systems. The six largest countries in the sample
adopted mixed systems. The Philippines reintroduced SMP three years after having chosen mixed-corrective. ${ }^{42}$ The remaining three plurality systems were chosen in microstates, all of which are former American colonies. The average population size among countries that adopted proportional systems is way below the average of all 20 cases, the mean values being 5.7 and 24 million people respectively. Concerning the level of party system fragmentation, a significant difference was observed between democracies that have changed from plurality to mixed or PR systems and democracies with plurality systems in general. The fragmented party systems in Thailand, the Philippines and Japan prior to electoral system change contribute largely to this pattern. However, these countries are also very large in terms of population. This leads to the question whether size or party system structure is the more important variable. Both factors may, of course, also have influenced the choice of electoral systems.

In addition to Marshall Islands, the Federated States of Micronesia and Belau, which all inherited the plurality system from the United States, another three countries in this sample chose their first electoral system after having been under foreign rule. Estonia, Latvia and Lithuania did not, however, adopt the Soviet electoral system. A strong relationship between regional diffusion and electoral system choice is observed. All proportional systems have been adopted as a consequence of imitation, whereas only two mixed, one majority, and no plurality system qualify as processes of regional diffusion. The chi-square value is significant at the 0.01 level. Patterns of diffusion comprise eleven of those 20 electoral systems adopted by democracies during the fourth epoch. No pattern appears with regard to form of government and electoral system choice.

The findings among democracies resemble those in the total population. None of the independent variables is of great importance during the first period. All in all, however, diffusion is related to four of ten cases. Almost every electoral system choice during the second period is related to some kind of diffusion. Eight cases were inherited, mostly from the United Kingdom, and three choices, all proportional ones, were inspired by neighboring countries. The British influence is also discernable with regard to other institutions: former colonies did not only

[^37]inherit the plurality system but also the parliamentary system with bicameral legislature. The frequent adoption of plurality systems in culturally fragmented countries during the third period is, once again, explained by notably British colonial rule. The same explanation applies to the common combination of plurality and parliamentarism. Contrary to the findings in the second period, plurality systems are more associated with unicameralism than bicameralism. In accordance with the theoretical arguments, countries that adopted PR were considerably smaller than countries that prefered majoritarian systems during the fourth epoch. Especially mixed systems were popular in countries with a large population. Colonial legacy was of little importance but regional diffusion was still relevant to the adoption of proportional systems.

### 6.3 Patterns of Diffusion: Summary

Three variables within the cultural and historical perspective have been analyzed: colonial diffusion, regional diffusion and temporal diffusion. On the whole, this approach has been much more fruitful than the rational approach in explaining variations of electoral system choice. All these three variables seem to be relevant explanatory factors.

Beginning with colonial diffusion, there is a bivariate association between British as well as French legacy and the adoption of majoritarian systems, plurality in particular. Among democracies, however, there is no French legacy since only two of the former French colonies were democratic when electoral systems were chosen. Two thirds of all countries that have been former colonies and have adopted electoral systems within ten years after the end of the colonial rule have inherited their electoral systems from the colonial powers. The strongest correlation is indeed reported between the variable that observes all former colonies and majoritarian systems.

The descriptive analysis suggests that regional diffusion is of appreciable importance in explaining electoral system choice. In accordance with Weyland's (2005) assessment, diffusion tends to have a clear geographical pattern. Slightly more than one third of all choices of electoral systems since 1945 are identified as processes of regional diffusion. In the democratic sample, however, the share is merely 22 per cent. Europe is largely characterized by regional diffusion, whereas
much fewer electoral systems in other parts of the world have been adopted as a consequence of influential neighboring countries. The pattern is to a great extent a consequence of the fact that large parts of Africa, Asia and the South Pacific have been under colonial rule at the beginning of the analyzed time period. Many countries in these regions have, consequently, inherited their electoral systems from the colonial powers. The correlation analyses of both samples return significant associations, indicating a link between regional diffusion and mixed/proportional systems.

As mentioned in the theoretical part of the study, Reilly and Reynolds (1999) maintain that former Spanish and Portuguese colonies mostly apply proportional systems. This pattern must be considered a result of regional diffusion rather than colonial diffusion, since the colonial rule in South America ended already in the nineteenth century. Moreover, PR was introduced in several Latin American countries long before Spain and Portugal adopted proportional systems. Notwithstanding, diffusion between Spain and Portugal on the one hand and Latin America on the other is not rejected. Despite nearly two centuries of Latin American independence, several cultural factors still bring the Latin American countries and the Iberian Peninsula together. As for electoral system choice, however, European electoral engineers played a major role in the adoption of list PR in several Latin American countries during the first few decades of the twentieth century. These initial PR choices have apparently influenced other countries on the continent later on.

Concerning temporal diffusion, some specific trends are discernable. Introduction of electoral provisions has been especially frequent during the 1960 s and 1990s, whereas the number of cases is relatively small in the 1950s and 1980s. This pattern certainly coincides with the frequeny of countries having declared independence at various points in time, but the illustration of electoral system change over time suggests that there may also be a trend effect irrelevant of the independence factor. Major electoral reforms did not become a typical phenomenon until the 1990s. Among democracies, a slightly discernable trend of reforms was present in the 1950s - thereafter, very few reforms took place until the 1990s. Four epochs of electoral system choice are distinguishable among the total as well as the democratic population. The cut-points between periods slightly differ but both categorizaitons indicate the same trend: after having been the most
popular system between 1945 and 1990, plurality systems have lost popularity in the 1990s at the expense of mixed and proportional systems. Compared to previous decades, the share of adopted mixed systems, especially in democracies, since 1990 is conspicuous.

The analyses of each period show that the importance of the explanatory variables varies at different points in time. However, it should be emphasized that the analyses are rather descriptive - no statistical techniques of controlling have been used. Patterns of diffusion are discernable but not very strong during the first period. Regional diffusion is somewhat more important than colonial legacy. The influence of the cultural and historical setting is overwhelming during the second and the third epoch. Especially British colonial legacy is of great importance. Contrary to the findings among cases in the first and the second period, regional diffusion is more associated with the adoption of plurality systems than PR during the third epoch. Party system transformation is a major determinant during the fourth period. The tendency of adopting mixed systems in foremost large countries strengthens the importance of rational explanations in recent times. A large part of all mixed and proportional systems is a consequence of regional diffusion. The findings correspond rather well to the pattern that Reilly and Reynolds (1999) have observed, particularly with regard to colonial influence during the first few postwar decades. The authors maintain that deliberate electoral system design is the distinguishing feature of the last few decades. Electoral system design has definitely been present in recent times, but not as prominently as the authors suggest.

## 7. THE INSTITUTIONAL PERSPECTIVE

### 7.1 Form of Government

In the following, the relationship between electoral system choice and other institutional choices is analyzed. The broad typology of four basic electoral systems applies to all three independent variables within the institutional perspective. Bivariate associations are studied by means of chi-square tests. In the first section, form of government is analyzed. Only democratic countries are included, because parliamentarism, semi-presidentialism and presidentialism cannot work satisfactory in non-democracies. Furthermore, some countries are excluded because their governmental systems cannot be classified according to this three-grade scheme. These countries are Sri Lanka (electoral system chosen in 1978), Kiribati (1979), Estonia (1992) and Lithuania (1992). Hence, the sample consists of 59 cases. 39 of these are associated with a parliamentary form of government. The remainder 20 cases are equally divided between semi-presidential and presidential governments.

Table 7.1. Form of government and electoral system choice. Crosstabulation, Pearson ChiSquare.

| Form of <br> government | Plurality <br> $(\mathbf{N})$ | \% | Majority <br> $(\mathbf{N})$ | $\mathbf{\%}$ | PR <br> $(\mathbf{N})$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Parliamentary | 20 | 51.3 | 1 | 2.6 | 10 | 25.6 | 8 | 20.5 |
| Semi-presidential | 1 | 10.0 | 3 | 30.0 | 3 | 30.0 | 3 | 30.0 |
| Presidential | 6 | 60.0 | 0 | 0 | 1 | 10.0 | 3 | 30.0 |
| Total N |  |  |  |  |  |  |  |  |

Note: Chi-square value 14.672, sig. . 023

The number and frequencies of electoral system choice within each category of the independent variable are given in table 7.1. 20 of the parliamentary regimes are combined with plurality systems, one with majority, ten with proportional, and eight are combined with mixed systems. Most of the parliamentary-plurality countries are former British colonies. The frequency of different electoral systems among parliamentary democracies corresponds rather well to the frequency of systems in the whole sample. A different pattern is observed among semi-
presidential countries. Only Lebanon has combined semi-presidentialism with plurality, whereas three of totally four majority systems have been chosen by semipresidential regimes. However, two of these three systems have been adopted in France. Countries that have chosen a semi-presidential form of government and mixed electoral systems are Suriname (1975), Seychelles (1976), and Madagascar (1998). Plurality systems are frequently represented in presidential regimes, whereas only Cyprus has combined presidentialism with PR. Three cases of presidentialism combined with mixed systems are identified: Venezuela (1993), Bolivia (1997) and the Philippines (1998).

In spite of a significant chi-square value at the 0.05 level, the findings do not correspond to the expectations to any greater extent. The majoritarian model (see Lijphart 1984; 1999) is certainly well represented - one third of the cases combine a parliamentary form of government with plurality elections. However, a majority of the presidential regimes are also related to majoritarian electoral systems. Merely one sixth of the cases corresponds to the optimal parliamentary-PR model (Lijphart 1991a).

### 7.2 Territorial Organization

Countries are organized on either federal or unitary basis. Contrary to the forms of government studied in the previous section, federalism and unitarism are applied in both democracies and non-democracies, although a federal arrangement is more meaningful when institutions work according to democratic principles. There are only 21 cases of federalism in the total data sample. Nine of the federal regimes are related to the adoption of plurality systems. Countries that have had federal arrangements or introduced these at the same time as plurality systems have been chosen are India (1950), Libya (1951), Malaysia (1958), Nigeria (1960), Kenya (1963), Equatorial Guinea (1968), Pakistan (1970), the Federated States of Micronesia (1991), and Belau (1994). Comoros is the only country that has combined federalism with a majority system. Six federal states have adopted proportional electoral systems: Brazil (1945), Venezuela (1946), Congo (Kinshasa) (1960), Czechoslovakia (1990), Yugoslavia (1993) and BosniaHerzegovina (1996). The five remaining cases are, accordingly, combinations of federalism and mixed systems. These are West Germany (1949), Mexico (1963), Yugoslavia (1992), Venezuela (1993) and Russia (1993). A chi-square test
comprising the total data sample is conducted in table 7.2 , indicating that territorial organization is not related to electoral system choice.

Table 7.2. Territorial organization and electoral system choice. Crosstabulation, Pearson ChiSquare.

| Territorial <br> organization | Plurality <br> $(\mathbf{N})$ | $\mathbf{\%}$ | Majority <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | PR <br> $(\mathbf{N})$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unitary | 97 | 39.3 | 39 | 15.8 | 64 | 25.9 | 47 | 19.0 |
| Federal | 9 | 42.9 | 1 | 4.8 | 6 | 28.6 | 5 | 23.8 |
| Total N |  |  |  |  |  |  |  |  |

Note: Chi-square value 1.920 , sig. . 589

The democratic sample is analyzed in table 7.3. Only four democratic countries have introduced or have already had federal arrangements when electoral systems have been chosen: Malaysia, the Federated States of Micronesia and Belau apply plurality systems, whereas Venezuela uses a mixed system. Despite the tendency of combining federalism with plurality systems, the number of democratic federal countries is too small to bring about a significant relationship. Consequently, no far-reaching conclusions can be drawn. As a whole, territorial organization is not related to electoral system choice.

Table 7.3. Territorial organization and electoral system choice in democracies. Crosstabulation, Pearson Chi-Square.

| Territorial <br> organization | Plurality <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Majority <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | PR <br> $(\mathbf{N})$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unitary | 24 | 40.7 | 5 | 8.5 | 16 | 27.1 | 14 | 23.7 |
| Federal | 3 | 75.0 | 0 | 0 | 0 | 0 | 1 | 25.0 |
| Total $\mathbf{N}$ |  |  |  |  |  |  |  |  |

Note: Chi-square value 2.456, sig. . 483

### 7.3 Chamber Structure

Chamber structure is the third variable of the institutional perspective, and the last of ten independent variables in the study. Countries that have unicameral
legislative bodies are distinguished from countries with an upper chamber. This distinction applies to democracies as well as non-democracies. About two thirds of all cases are associated with unicameralism - the number of one-chamber parliaments is 172 compared to 93 cases of bicameralism. Three cases are unknown. ${ }^{43}$ The relationship between chamber structure and electoral system choice in the total data sample is analyzed in table 7.4. There is a diminutive tendency of combining unicameralism with majoritarian systems, and bicameralism with proportional or mixed systems. Notwithstanding, the association is far from significant.

Table 7.4. Chamber structure and electoral system choice. Crosstabulation, Pearson ChiSquare.

| Chamber <br> structure | Plurality <br> (N) | $\mathbf{\%}$ | Majority <br> $(\mathbf{N})$ | \% | PR <br> (N) | \% | Mixed <br> $(\mathbf{N})$ | \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unicameral | 72 | 41.9 | 27 | 15.7 | 43 | 25.0 | 30 | 17.4 |
| Bicameral | 33 | 35.5 | 12 | 12.9 | 26 | 28.0 | 22 | 23.7 |
|  |  |  |  |  |  |  |  |  |
| Total N | 105 | 39.6 | 39 | 14.7 | 69 | 26.0 | 52 | 19.6 |

Note: Chi-square value 2.330, sig. . 507

Table 7.5. Chamber structure and electoral system choice in democracies. Crosstabulation, Pearson Chi-Square.

| Chamber <br> structure | Plurality <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Majority <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | PR <br> $\mathbf{( N )}$ | $\mathbf{\%}$ | Mixed <br> $(\mathbf{N})$ | $\mathbf{\%}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unicameral | 13 | 38.2 | 3 | 8.8 | 11 | 32.4 | 7 | 20.6 |
| Bicameral | 14 | 48.3 | 2 | 6.9 | 5 | 17.2 | 8 | 27.6 |
|  |  |  |  |  |  |  |  |  |
| Total N | 27 | 42.9 | 5 | 7.9 | 16 | 25.4 | 15 | 23.8 |

Note: Chi-square value 2.171 , sig. . 538

A similar analysis among democracies is conducted in table 7.5. Bicameralism is, relatively speaking, much more common in democracies than in non-democracies. 34 of the democratic cases are associated with unicameral assemblies, whereas 29 are cases of bicameralism. Contrary to the pattern in the total data sample, plurality systems are more associated with bicameral regimes, and proportional systems are

[^38]more related to unicameral regimes. Consequently, the findings contradict the assumptions. However, the relationship is weak and fails to reach any level of significance.

The large share of bicameral countries with plurality systems may be a result of British colonial legacy. Several former British colonies have not only inherited their electoral systems but also the chamber structure from the United Kingdom. Examples of these countries are Jamaica, Trinidad \& Tobago, Bahamas, Grenada, Saint Lucia and Belize. However, there are also former British colonies with a single legislative chamber, e.g. Saint Kitts \& Nevis, Dominica, Solomon Islands and Tuvalu. Italy, Japan and Thailand are some democratic countries with two legislative chambers and mixed electoral systems. Turkey and the Czech Republic are examples of countries that combine bicameralism with proportional systems.

### 7.4 The Institutional Perspective: Summary

Three variables within the institutional perspective have been analyzed: form of government, territorial organization and chamber structure. Only form of government is significantly related to the choice of electoral systems. However, the pattern is far from clear-cut. Parliamentary and presidential regimes tend to favor plurality systems, whereas the combination of semi-presidentialism and plurality is rare. Another striking feature is that proportional systems are rarely combined with presidentialism. This conclusion might be surprising, considering the well-known fact that several South American countries have presidential forms of government and proportional electoral systems. However, only one (the semi-presidential Guyana) of those South American countries that apply list PR was democratic when electoral system was chosen. All other South American countries that have adopted electoral systems under democratic circumstances use mixed electoral systems. The frequent changes of electoral rules in France contribute to the third distinct feature concerning regime types and electoral system choice; majority systems are foremost associated with semi-presidentialism.

It should be observed that the distinction between executive-legislative relations is not as clear-cut in Lijphart's models of democracy as in the analysis above. The number of presidential regimes among democracies is much smaller than the number of parliamentary regimes, and an accurate categorization of executive-
legislative relations should also take varying degrees of dominance and balance of power into consideration. However, the macroscopic approach including observations as of 1945 pose limits on such classifications.

To all intents and purposes, no relationship exists between territorial organization and electoral system; neither is there a connection between chamber structure and the dependent variable. The only discernable pattern concerning territorial organization is that three federal democracies of totally four have chosen plurality systems. Two of these have probably inherited not only the electoral system but also the federal system from the United States. As for chamber structure, there is a diminutive tendency towards the combination of bicameralism and proportional/mixed systems as well as unicameralism and plurality systems in the total data sample, and an opposite tendency to combine bicameralism with plurality, and unicameralism with PR in democracies. Nevertheless, the connection is rather weak. Again, the categorization is not as accurate as in Lijphart's (1999) characterization of Westminster and consensus democracies. In addition to unicameral assemblies, the former may also be characterized by bicameralism with a dominant lower house. The reservation above also applies here.

However, as mentioned earlier, the concepts of majoritarian and consensus democracy are not very appropriate in this context, because the present study consists of considerably more non-democracies than democracies. By way of conclusion, the influence of political institutions on electoral system choice is limited. Although some political institutions may be dependent on other institutions within the constitutional framework, the choice of electoral system does not seem to be affected by other institutional choices.

## 8. MULTIVARIATE ANALYSIS

### 8.1 On the Choice of Statistical Technique: Logistic Regression

Bivariate associations between independent variables and electoral system choice have been analyzed in the three preceding chapters, each of them dealing with one basic perspective. In this chapter, the strength of the explanatory variables with regard to the dependent variable is analyzed in order to distinguish the relevant determinants of electoral system choice. By way of introduction, the applied statistical technique and the presented values in the multivariate analyses are described.

Since the dependent variable is categorical, logistic regression is applied. There are basically three different values to estimate in logistic regression: probabilities, odds, and logged odds. Logistic regression is basically a matter of estimating probabilities, i.e. the likelihood of an occurrence relative to the likelihood of a nonoccurrence. However, the likelihood of an occurrence depends on the level of the independent variable, which means that the relationships between independent variables and probabilities cannot be fully expressed by a single coefficient. By dividing the probability value (which ranges from 0 to 1 ) with one minus the probability value, the odds of having an event is received. The final step in the logit process is to take the natural logarithm of the odds, thereby obtaining the logged odds, which are represented by the B-coefficients in the SPSS output. The B-coefficient indicates the change in the logged odds of experiencing an event or having a characteristic for a one-unit change in the independent variable.

In addition to the logged odds and the odds, SPSS provides the standard error, the Wald value, and the significance value for each independent variable. The Wald value is the square of the ratio of the coefficient divided by its standard error. Contrary to the logged odds, the Wald values of the independent variables are comparable with each other irrespective of the measure scale. However, Fred Pampel (2000: 30) maintains that with a large absolute value for the logistic regression coefficient, the estimated standard error might lack precision because of rounding error, thereby providing an incorrect test of significance. Because statistical significance depends strongly on sample size, he continues, the significance value provides little information on the strength of the relationship
between independent and dependent variables. Particularly large samples can produce significant values for otherwise inconsiderable effects.

The Baysian information criterion (BIC), constructed by A. E. Raftery (1995), is therein a more satisfying test of significance. The BIC value is obtained by subtracting the logarithm of the population from the Wald value. First of all, the BIC value should exceed zero to reach some level of significance. For coefficients above zero, Raftery specifies rules of thumb to evaluate different grades of evidence in the following way: a BIC difference of $0-2$ is weak, 2-6 is positive, 6 10 is strong, and larger than 10 is considered very strong. However, when variables in a model are compared with each other, the BIC value does not explain more than other coefficients, because it is, after all, dependent on the square of the logged odds relative to the standard error. In the following analyses, consequently, I shall present B-coefficients, standard errors, and values of significance. All independent variables are coded on a measure scale ranging from 0 to 1 . At a first glance, the demonstration of the odds would be a more appropriate solution than the logged odds, since the odds represent the factor by which the probability of having an event is multiplied as a consequence of a one-unit change in the independent variable. However, a preliminary analysis reveals that the standard errors vary to a great extent, which in turn implies that the odds have little concrete meaning.

The model chi-square value, the $-2 \log$ likelihood value, and the Nagelkerke R square value for the model as a whole are also presented. The model chi-square value tests the null hypothesis that all coefficients other than the constant equal 0 . The larger the chi-square value, the greater the model improvement above the baseline. A test of significance on the basis of this value is provided. The $-2 \log$ likelihood value reflects the likelihood that the data would be observed given the parameter estimates. It can be thought of as the deviation from a perfect model in which the log likelihood equals 0 . The closer the $-2 \log$ likelihood value to zero, the better the parameters do in producing the observed data. The Nagelkerke R square is a measure referred to as the pseudo-variance explained, and has a minimum of 0 and maximum of 1 . The value cannot decrease when another variable is added to the model.

The primary method for dealing with a nominal dependent variable consisting of three or more categories is multinomial logistic regression, contrary to binary logistic regression designed for dummy dependent variables. The dependent variable of the present study consists of four categories. In running multinomial logistic regression, SPSS automatically selects the fourth category as the baseline and estimates sets of coefficients for three contrasts: category one with category four, category two with category four, and category three with category four. Each set of coefficients represents the effects of a unit change in the explanatory variables on the logged odds of belonging to each category relative to the reference category. In order to make a complete estimation involving all categories of the dependent variable, another three comparisons must be made: category one with category three, category two with category three, and category one with category two. In each comparison, the coefficients refer only to the subset of cases falling into the two categories used in a contrast.

A categorical dependent variable that has more than two values might also lend itself to a set of separate binary logistic regressions. Four categories might involve four logistic regressions with four dummy variables: the first category versus all others, the second category versus all others, the third category versus all others, and the fourth category versus all others. However, this strategy is marred by three difficulties. First, the separate maximum likelihood estimation for each logistic regression equation does not pay attention to overlap across equations. In contrast, multinomial logistic regression jointly maximizes the likelihood that the estimates of the parameters predicting each category of the dependent variable could produce the observed sample data. Second, the combination of several categories in making a comparison with one of the categories implies that precise contrast between two categories cannot be isolated. Third, the use of four logistic regressions for four categories involves redundancy. Three dummy variables can fully represent relationships of independent variables with four categories of a dependent variable.

The advantage of running several separate binary regressions instead of multinomial regression is that the number of cases is larger, which means that the results are more reliable. The number of cases in each category of the dependent variable in the present study is as follows: 106 plurality systems, 40 majority systems, 70 proportional systems and 52 mixed systems. The number of cases per category may be regarded as high enough, since each comparison consists of at
least 90 cases. Notwithstanding, as a matter of precaution, I shall conduct binary logistic regressions for each category of the dependent variable in order to doublecheck the findings. These regression results are not, however, presented in table format. Concerning the democratic population, separate binary logistic regressions for each electoral system are preferred to multinomial regression, because the sample consists of only 63 cases. By comparing one electoral system with all the others at the same time, the largest possible number of cases in each comparison is obtained. Nevertheless, the results need to be carefully interpreted because of the small sample.

### 8.2 Multivariate Analysis - All Countries

Since variables of three competing perspectives are included in the study, three different regression models are presented. As mentioned earlier, party system structure and party system transformation cannot be included in the regression analyses, which means that the rational perspective is represented by two variables only: population size and ethnic/cultural diversity. Either ethnic or cultural diversity must be excluded, because they correlate to a great extent with each other. ${ }^{44}$ Cultural diversity is a more comprehensive variable than ethnic diversity, because it takes several aspects into consideration. Therefore, cultural diversity is chosen. Cases of alternative vote are excluded from those analyses that include cultural diversity, because this electoral method is considered appropriate for ethnically and culturally diverse countries in contrast to other majority formulas.

Because only two variables of the rational perspective are analyzed, I shall begin with an analysis of patterns of diffusion. Thereafter, cultural diversity and population size are added. In the last analysis of the total data sample, variables of all three perspectives are included. Another reason to begin with the cultural and historical perspective instead of the rational perspective is to keep the number of models at a minimum. The first model (table 8.1) is rather similar to the most parsimonious model, making a presentation of such a model in table format redundant. Form of government is not analyzed in the total sample, because this variable concerns democracies only. To begin with, a decision on which variables of the cultural and historical perspective to include in the logistic regression must

[^39]be made. As to colonial diffusion, four variables are conceivable: British legacy, French legacy, Soviet legacy, and a fourth variable that observes all former colonies. Legacy of other colonial powers than these are not considered, because they possessed only a few colonies.

In section 6.1.1, we noticed that Soviet legacy does not correlate with electoral system choice. Accordingly, this variable is not included in the regression analysis. A control for multicollinearity shows that the variable that observes all cases of colonial diffusion correlates rather strongly with both British legacy and French legacy, particularly with the first mentioned. As a consequence, the variable that concerns all colonies is excluded. This variable also correlates significantly with regional diffusion and temporal diffusion, which further justifies the exclusion. Both regional and temporal diffusion are operationalized as dummy variables. The latter is represented by four dummies, each variable denoting a distinct period. The first period, which consists of considerably fewer cases than the following periods, is excluded from the analysis.

The four variables of the cultural and historical perspective are analyzed in table 8.1. Beginning with the comparison of plurality systems with other systems, we notice that British legacy stands out as the most important factor. French legacy also affects the adoption of plurality systems but not to the same extent as British legacy. The rareness of plurality choices in recent times results in significant effects of the fourth period when plurality systems are compared to the other electoral system categories. The association is particularly strong when mixed systems are compared to plurality systems, suggesting that mixed systems have been very popular during the fourth period. Distinct trends of electoral system choice did not exist during the second and the third period. Regional diffusion plays an important role in explaining the introduction of proportional systems in comparison with majority and mixed systems.

The model chi-square value is significant at the 0.001 level. SPSS also provides general tests of significance on the basis of the chi-square value for each independent variable, called likelihood ratio tests. The effects of British and French legacy are significant at the 0.001 level, whereas regional diffusion and the fourth period exceed the 0.01 level of significance.

Table 8.1. Patterns of diffusion and electoral system choice. Multinomial logistic regression.

| Dependent variable | Independent variables | B | Std. error | Prob. |
| :---: | :---: | :---: | :---: | :---: |
| Majority - plurality | British legacy | -3.006 | 1.082 | ** |
|  | French legacy | -1.663 | . 868 |  |
|  | Regional diffusion | -. 741 | . 464 |  |
|  | Period II (1956-1969) | -. 086 | . 736 |  |
|  | Period III (1970-1989) | -. 165 | . 678 |  |
|  | Period IV (1990-2003) | 1.665 | . 677 | * |
| Mixed - plurality | British legacy | -2.392 | . 815 | ** |
|  | French legacy | -2.397 | 1.117 | * |
|  | Regional diffusion | -. 747 | . 441 |  |
|  | Period II (1956-1969) | . 189 | . 766 |  |
|  | Period III (1970-1989) | . 248 | . 696 |  |
|  | Period IV (1990-2003) | 2.302 | . 702 | *** |
| PR - plurality | British legacy | -1.961 | . 636 | ** |
|  | French legacy | -3.080 | 1.081 | ** |
|  | Regional diffusion | . 480 | . 392 |  |
|  | Period II (1956-1969) | . 206 | . 567 |  |
|  | Period III (1970-1989) | -. 764 | . 577 |  |
|  | Period IV (1990-2003) | 1.258 | . 580 | * |
| Mixed - majority | British legacy | . 614 | 1.297 |  |
|  | French legacy | -. 734 | 1.336 |  |
|  | Regional diffusion | -. 006 | . 465 |  |
|  | Period II (1956-1969) | . 275 | . 917 |  |
|  | Period III (1970-1989) | . 413 | . 823 |  |
|  | Period IV (1990-2003) | . 636 | . 733 |  |
| PR - majority | British legacy | 1.046 | 1.190 |  |
|  | French legacy | -1.417 | 1.311 |  |
|  | Regional diffusion | 1.221 | . 434 | ** |
|  | Period II (1956-1969) | . 292 | . 768 |  |
|  | Period III (1970-1989) | -. 598 | . 739 |  |
|  | Period IV (1990-2003) | -. 408 | . 633 |  |
| PR - mixed | British legacy | . 432 | . 955 |  |
|  | French legacy | -. 683 | 1.488 |  |
|  | Regional diffusion | 1.227 | . 401 | ** |
|  | Period II (1956-1969) | . 017 | . 794 |  |
|  | Period III (1970-1989) | -1.012 | . 755 |  |
|  | Period IV (1990-2003) | -1.044 | . 659 |  |
| N |  | 268 |  |  |
| Model chi-square |  | 126.851 |  | *** |
| -2 Log likelihood |  | 133.425 |  |  |
| Nagelkerke R square |  | . 406 |  |  |

Note: * $=$ significant at the 0.05 level, ${ }^{* *}=$ significant at the 0.01 level, $* * *=$ significant at the 0.001 level

Double-checking with four separate binary logistic regression models confirms these results. The comparison of plurality systems with all other systems returns the highest chi-square value. All models are significant at the 0.001 level, except for the comparison between majority systems and other systems, which barely fails to reach the 0.01 level of significance. British and French legacy explain the adoption of plurality systems, both effects being significant at the 0.001 level. The model that compares majority systems with other systems is very poor - partly because the majority systems constitute only 15 per cent of all cases, partly because majority systems do not stand out from other systems as a homogeneous group, at least not in terms of patterns of diffusion. Temporal diffusion during the fourth period is the most important variable in explaining the introduction of mixed systems. Regional diffusion stands out as the principal determinant of electoral system choice when proportional systems are compared to all other systems.

Cultural diversity and population size are added to the regression model in tables 8.2 and 8.3. Comparisons between plurality systems and all other systems are presented in table 8.2 , whereas coefficients of the three remaining comparisons are given in table 8.3. The chi-square and the Nagelkerke values are slightly higher but the $-2 \log$ likelihood value also exceeds the one in table 8.1 , suggesting that the explanatory model is not improved by including the two variables of the rational perspective. Neither cultural diversity nor population size reaches a satisfying level of significance in any comparison between different categories of the dependent variable. However, when plurality systems are compared with all other systems respectively, the significance of cultural diversity is not very far from the 0.05 level, indicating that there is a vague pattern of plurality systems associated with culturally fragmented countries. Concerning patterns of diffusion, the tendencies observed in the former model remain, slightly strengthening the importance of temporal diffusion during the fourth period and weakening the role of French legacy. The likelihood ratio test returns significant chi-square values for British legacy, French legacy, and the fourth period at the 0.001 level, while the effect of regional diffusion comes very close to that level.

When these findings are double-checked with four separate binary logistic regressions, the difference between plurality systems and other systems is once again the most prominent of all, whereas the comparison of majority systems with
other systems returns little to explain. The only difference in comparison with the multinomial regression is that the impact of cultural diversity is significant at the 0.05 level when plurality systems are compared to all other systems, suggesting that the adoption of plurality systems is related to a high level of cultural fragmentation. Mixed systems are still linked to the fourth period, and proportional systems are associated with regional diffusion.

Table 8.2. Patterns of diffusion, the rational perspective and electoral system choice, three comparisons. Multinomial logistic regression.

| Dependent variable | Independent variables | B | Std. error | Prob. |
| :---: | :---: | :---: | :---: | :---: |
| Majority - plurality | British legacy | -2.767 | 1.124 | * |
|  | French legacy | -1.384 | . 887 |  |
|  | Regional diffusion | -. 914 | . 495 |  |
|  | Period II (1956-1969) | -. 041 | . 781 |  |
|  | Period III (1970-1989) | . 109 | . 702 |  |
|  | Period IV (1990-2003) | 1.869 | . 716 | ** |
|  | Cultural diversity | -. 955 | . 571 |  |
|  | Population size | . 771 | 1.562 |  |
| Mixed - plurality | British legacy | -1.725 | . 860 | * |
|  | French legacy | -2.190 | 1.133 |  |
|  | Regional diffusion | -. 778 | . 456 |  |
|  | Period II (1956-1969) | . 528 | . 787 |  |
|  | Period III (1970-1989) | . 574 | . 720 |  |
|  | Period IV (1990-2003) | 2.676 | . 737 | *** |
|  | Cultural diversity | -. 945 | . 538 |  |
|  | Population size | 1.940 | 1.494 |  |
| PR - plurality | British legacy | -1.736 | . 666 | ** |
|  | French legacy | -2.869 | 1.088 | ** |
|  | Regional diffusion | . 498 | . 405 |  |
|  | Period II (1956-1969) | . 398 | . 580 |  |
|  | Period III (1970-1989) | -. 580 | . 587 |  |
|  | Period IV (1990-2003) | 1.458 | . 598 | * |
|  | Cultural diversity | -. 819 | . 489 |  |
|  | Population size | . 777 | 1.325 |  |
| N |  | 263 |  |  |
| Model chi-square |  | 131.192 |  | *** |
| -2 Log likelihood |  | 554.440 |  |  |
| Nagelkerke R square |  | . 423 |  |  |

For key to the signs, see table 8.1.

Table 8.3. Patterns of diffusion, the rational perspective and electoral system choice, three comparisons. Multinomial logistic regression.

| Dependent variable | Independent variables | B | Std. error | Prob. |
| :---: | :---: | :---: | :---: | :---: |
| Mixed - majority | British legacy | . 748 | 1.332 |  |
|  | French legacy | -. 805 | 1.347 |  |
|  | Regional diffusion | . 136 | . 490 |  |
|  | Period II (1956-1969) | . 570 | . 952 |  |
|  | Period III (1970-1989) | . 465 | . 843 |  |
|  | Period IV (1990-2003) | . 808 | . 762 |  |
|  | Cultural diversity | . 010 | . 562 |  |
|  | Population size | 1.169 | 1.578 |  |
| PR - majority | British legacy | 1.031 | 1.223 |  |
|  | French legacy | -1.484 | 1.321 |  |
|  | Regional diffusion | 1.413 | . 462 | ** |
|  | Period II (1956-1969) | . 439 | . 809 |  |
|  | Period III (1970-1989) | -. 689 | . 759 |  |
|  | Period IV (1990-2003) | -. 410 | . 664 |  |
|  | Cultural diversity | . 137 | . 546 |  |
|  | Population size | . 006 | 1.529 |  |
| PR - mixed | British legacy | . 283 | . 983 |  |
|  | French legacy | -. 679 | 1.493 |  |
|  | Regional diffusion | 1.277 | . 410 | ** |
|  | Period II (1956-1969) | -. 130 | . 807 |  |
|  | Period III (1970-1989) | -1.154 | . 773 |  |
|  | Period IV (1990-2003) | -1.218 | . 684 |  |
|  | Cultural diversity | . 127 | . 496 |  |
|  | Population size | -1.162 | 1.453 |  |
| N |  | 263 |  |  |
| Model chi-square |  | 131.192 |  | *** |
| -2 Log likelihood |  | 554.440 |  |  |
| Nagelkerke R square |  | . 423 |  |  |

For key to the signs, see table 8.1.

Variables of all three perspectives are included in tables 8.4 and 8.5. Comparisons between plurality systems and all other systems are presented in table 8.4 , whereas coefficients of the three remaining comparisons are given in table 8.5. The institutional perspective is represented by territorial organization and chamber structure. It has been emphasized that these two variables are connected to each other. More specifically, bicameralism is often considered necessary in federal systems. A test of covariance in this data sample shows that they correlate to some
extent but the coefficient is smaller than 0.3 , consequently permitting an inclusion of both variables in the regression model.

Table 8.4. Three explanatory perspectives and electoral system choice, three comparisons. Multinomial logistic regression.

| Dependent variable | Independent variables | B | Std. error | Prob. |
| :--- | :--- | ---: | ---: | ---: |
| Majority - plurality | British legacy | -2.724 | 1.145 | $*$ |
|  | French legacy | -1.317 | .924 | $*$ |
|  | Regional diffusion | -1.117 | .512 | $*$ |
|  | Period II (1956-1969) | -.532 | .826 |  |
|  | Period III (1970-1989) | -.182 | .724 | $*$ |
|  | Period IV (1990-2003) | 1.694 | .728 | $*$ |
|  | Cultural diversity | -.846 | .591 |  |
|  | Population size | .820 | 1.682 |  |
|  | Territorial organization | -1.582 | 1.161 |  |
|  | Chamber structure | -.120 | .530 |  |
| Mixed - plurality | British legacy | -2.088 | .864 | $*$ |
|  | French legacy | -2.208 | 1.141 |  |
|  | Regional diffusion | -.847 | .461 |  |
|  | Period II (1956-1969) | .421 | .793 |  |
|  | Period III (1970-1989) | .468 | .739 | $* * *$ |
|  | Period IV (1990-2003) | 2.583 | .745 | $* * *$ |
|  | Cultural diversity | -.950 | .550 |  |
|  | Population size | 1.813 | 1.533 |  |
|  | Territorial organization | -.288 | .735 |  |
|  | Chamber structure | .131 | .475 |  |
| PR - plurality | British legacy | -1.789 | .669 | $* *$ |
|  | French legacy | -2.947 | 1.095 | $* *$ |
|  | Regional diffusion | .415 | .411 |  |
|  | Period II (1956-1969) | .421 | .595 |  |
|  | Period III (1970-1989) | -.623 | .616 | $*$ |
|  | Period IV (1990-2003) | 1.449 | .613 | $*$ |
|  | Cultural diversity | -.837 | .499 |  |
| N | .875 | 1.367 |  |  |
| Model chi-square | Population size | .251 | .664 |  |
| $\mathbf{- 2 ~ L o g ~ l i k e l i h o o d ~}$ | Territorial organization | -.028 | .427 |  |
| Nagelkerke R square | Chamber structure | 260 |  | $* * *$ |
|  |  | 135.265 |  |  |

For key to the signs, see table 8.1.

Table 8.5. Three explanatory perspectives and electoral system choice, three comparisons. Multinomial logistic regression.

| Dependent variable | Independent variables | B | Std. error | Prob. |
| :--- | :--- | ---: | ---: | ---: |
| Mixed - majority | British legacy | .636 | 1.348 |  |
|  | French legacy | -.890 | 1.375 |  |
|  | Regional diffusion | .269 | .503 |  |
|  | Period II (1956-1969) | .952 | .994 |  |
|  | Period III (1970-1989) | .651 | .860 |  |
|  | Period IV (1990-2003) | .888 | .772 |  |
|  | Cultural diversity | -.104 | .578 |  |
|  | Population size | .993 | 1.709 |  |
|  | Territorial organization | 1.293 | 1.167 |  |
|  | Chamber structure | .251 | .518 |  |
| PR - majority | British legacy | .936 | 1.242 |  |
|  | French legacy | -1.630 | 1.346 | $* * *$ |
|  | Regional diffusion | 1.532 | .478 | $* * *$ |
|  | Period II (1956-1969) | .952 | .863 |  |
|  | Period III (1970-1989) | -.441 | .784 |  |
|  | Period IV (1990-2003) | -.245 | .682 |  |
|  | Cultural diversity | .009 | .562 |  |
|  | Population size | .055 | 1.663 |  |
|  | Territorial organization | 1.331 | 1.156 |  |
|  | Chamber structure | .093 | .506 |  |
| PR - mixed | British legacy | .300 | .986 |  |
|  | French legacy | -.739 | 1.499 |  |
|  | Regional diffusion | 1.263 | .412 | $* *$ |
|  | Period II (1956-1969) | .000 | .815 |  |
|  | Period III (1970-1989) | -1.092 | .793 |  |
|  | Period IV (1990-2003) | -1.133 | .695 |  |
|  | Cultural diversity | .113 | .505 |  |
| N | Population size | . .937 | 1.508 |  |
| Model chi-square | Territorial organization | .038 | .710 |  |
| $\mathbf{- 2}$ Log likelihood | Chamber structure | -.158 | .440 |  |
| Nagelkerke R square |  | 260 |  | $* * *$ |

For key to the signs, see table 8.1.

The model chi-square and the Nagelkerke values are slightly higher, whereas the $2 \log$ likelihood value is modestly lower than in the previous model, indicating that the model is only slightly improved by adding variables of the institutional perspective. By comparing logged odds with standard errors, we notice that
territorial organization and chamber structure have no influence on electoral system choice in any comparison. Neither is population size nor cultural diversity significantly related to the dependent variable, although the effect of cultural diversity comes rather close to the 0.05 level. Again, the adoption of plurality systems is associated with British and French colonial legacy - the latter with regard to the comparison between plurality and PR. However, it should be pointed out that the associations are not very strong. In contrast, the adoption of mixed systems and the unpopularity of plurality systems is strongly related to temporal diffusion during the fourth period. The model also emphasizes the importance of regional diffusion in explaining the adoption of proportional systems. As in previous models, no variable explains anything when majority and mixed systems are compared with each other. The double-checking with four binary logistic regressions confirms these findings.

Normally, a final model that constitutes a parsimonious compromise is lastly presented. In this case, the most parsimonious model would consist of British legacy, French legacy, regional diffusion and the fourth period, i.e. a model very similar to the first model. When the second and the third period are excluded from the first model, the model chi-square value (122.1) and the Nagelkerke value (0.394) are only modestly affected, while the -2 Log likelihood value is considerably improved from 133.4 to 78.7 . In comparison with table 8.1 , the most parsimonious model strengthens the significance of temporal diffusion in the fourth period. British legacy, and to e lesser extent French legacy, are still related to the introduction of plurality systems, whereas regional diffusion is associated with the adoption of proportional systems.

As a whole, these four variables explain electoral system choice in the total population. None of the other independent variables are significantly related to electoral system choice in any comparison. In general, the effect of French legacy is weaker than the effect of British legacy, regional diffusion and temporal diffusion. The importance of temporal diffusion is confined to the frequent adoption of mixed electoral systems and the decline of plurality system choices in the fourth period from 1990 to 2003.

### 8.3 Multivariate Analysis - Democratic Countries

In the following, bivariate logistic regression analyses are conducted solely with cases that fulfil the criteria of democracy. Majority systems are not compared to the other electoral systems, because there are only five 'democratic' cases of majority systems. There is, in other words, no variance to explain concerning majority systems in relation to other electoral systems.

Table 8.6. Patterns of diffusion and electoral system choice in democracies. Binary logistic regression.

| Dependent variables | Independent variables | B | Std. error | Prob. |
| :--- | :--- | ---: | ---: | ---: |
| Plurality systems | British legacy | 2.117 | .835 | $*$ |
|  | Regional diffusion | -2.089 | 1.148 |  |
|  | Period II (1958-1970) | -.302 | 1.110 |  |
|  | Period III (1974-1988) | -.215 | 1.016 |  |
|  | Period IV (1991-2003) | -.308 | .959 |  |
|  | Model chi-square | 22.818 |  | $* * *$ |
|  | -2 Log likelihood | 60.413 |  |  |
|  | Nagelkerke R square | .419 |  |  |
| Proportional systems | British legacy | -1.287 | .951 | $* *$ |
|  | Regional diffusion | 2.539 | .881 |  |
|  | Period II (1958-1970) | 1.073 | 1.166 |  |
|  | Period III (1974-1988) | .110 | 1.143 |  |
|  | Period IV (1991-2003) | -1.212 | 1.093 |  |
|  | Model chi-square | 17.417 |  | $* *$ |
|  | Mixed systems | Log likelihood | 51.235 |  |
|  | Nagelkerke R square | .363 |  |  |
|  | British legacy | -1.588 | 1.293 |  |
|  | Regional diffusion | -1.220 | .850 |  |
|  | Period II (1958-1970) | -7.826 | 27.551 |  |
|  | Period III (1974-1988) | -.806 | 1.131 |  |
|  | Period IV (1991-2003) | .870 | .890 | $* *$ |
|  | Model chi-square | 18.882 |  | $*$ |
|  | -2 Log likelihood | 49.168 |  |  |
|  | Nagelkerke R square | .396 |  |  |

Note: $\mathrm{N}=61$. For key to the signs, see table 8.1.

Again, patterns of diffusion are initially analyzed. Temporal diffusion is represented by a dummy for each period - the first period consisting of ten cases is excluded from the analysis. French legacy is not included in the model, because
there are only two (Gabon and Vanuatu) former French colonies in the democratic population, none of which inherited electoral provisions from France.

Coefficients for British legacy, regional diffusion and temporal diffusion (period IV) in three separate regression models are presented in table 8.6. British legacy stands out as the main determinant of choosing plurality systems in comparison with other electoral systems. The value of significance for British legacy is 0.011 . Contrary to the findings in the total data sample, temporal diffusion does not explain the adoption of mixed systems in this model. No variable has a significant effect when mixed systems are compared to other systems. Regional diffusion explains the adoption of proportional systems relative to other electoral systems. The highest chi-square value is observed in the comparison between plurality systems and other systems.

In the previous section, cultural diversity and population size were added to patterns of diffusion in a second model. In the democratic sample, however, British legacy and population size cannot be included in the regression analysis, because they, first of all, correlate to a great extent. The strength of the covariance (0.551) does certainly not make an inclusion of both variables impossible, but the reason why they are related to each other is that a large share of the democratic microstates are former British colonies. In other words, the relationship between population size and electoral system choice is contaminated by the peculiarities of microstates. ${ }^{45}$ In contrast to the statements by Rokkan (1970), Katzenstein (1985) and Rogowski (1987), D. Anckar (2002) asserts that plurality systems are related to smallness. The pattern is particularly evident among diminutive microstates. After a discussion on other potential explanations, D. Anckar (2002: 16) concludes that the thesis of diffusion cannot be evaded. British influence, rather than population size or other rational explanations, is the critical factor in this respect. The covariance between these two variables is considerably smaller in the total data sample. This matter is more evident among democracies, because most of the former British colonies are characterized by a high level of democracy.

[^40]Table 8.7. Three explanatory perspectives and electoral system choice in democracies. Binary logistic regression.

| Dependent variables | Independent variables | B | Std. error | Prob. |
| :---: | :---: | :---: | :---: | :---: |
| Plurality systems | British legacy | 2.711 | 1.235 | * |
|  | Regional diffusion | -2.921 | 1.527 |  |
|  | Period II (1958-1970) | -1.730 | 1.752 |  |
|  | Period III (1974-1988) | -1.133 | 1.485 |  |
|  | Period IV (1991-2003) | -2.294 | 1.473 |  |
|  | Cultural diversity | 3.348 | 1.282 | ** |
|  | Form of government | . 354 | 1.288 |  |
|  | Territorial organization | 1.286 | 1.741 |  |
|  | Chamber structure | -. 066 | . 810 |  |
|  | Model chi-square | 35.395 |  | *** |
|  | -2 Log likelihood | 41.952 |  |  |
|  | Nagelkerke R square | . 626 |  |  |
| Proportional systems | British legacy | -1.186 | 1.264 |  |
|  | Regional diffusion | 3.323 | 1.205 | ** |
|  | Period II (1958-1970) | 1.929 | 1.432 |  |
|  | Period III (1974-1988) | . 406 | 1.432 |  |
|  | Period IV (1991-2003) | -. 501 | 1.281 |  |
|  | Cultural diversity | -1.306 | 1.120 |  |
|  | Form of government | -2.305 | 1.577 |  |
|  | Territorial organization | -5.967 | 44.142 |  |
|  | Chamber structure | -. 561 | . 864 |  |
|  | Model chi-square | 23.858 |  | ** |
|  | -2 Log likelihood | 39.124 |  |  |
|  | Nagelkerke R square | . 514 |  |  |
| Mixed systems | British legacy | -1.366 | 1.541 |  |
|  | Regional diffusion | -1.367 | 1.059 |  |
|  | Period II (1958-1970) | -9.157 | 41.553 |  |
|  | Period III (1974-1988) | -. 247 | 1.400 |  |
|  | Period IV (1991-2003) | 2.213 | 1.236 |  |
|  | Cultural diversity | -2.367 | 1.310 |  |
|  | Form of government | 1.903 | 1.382 |  |
|  | Territorial organization | -2.585 | 1.790 |  |
|  | Chamber structure | -. 060 | . 826 |  |
|  | Model chi-square | 22.671 |  | ** |
|  | -2 Log likelihood | 40.310 |  |  |
|  | Nagelkerke R square | . 493 |  |  |

Note: $\mathrm{N}=56$. For key to the signs, see table 8.1.

Variables of all three perspectives are included in table 8.7. I consider it unnecessary to present a model consisting exclusively of patterns of diffusion and
the rational perspective, since it would include merely one additional variable in comparison with the previous table. The explanatory model is somewhat improved, the model chi-square and the Nagelkerke values now being larger, and the $-2 \log$ likelihood values being smaller than in the previous table. In accordance with previous findings, the comparison of plurality systems with all other systems returns the highest chi-square value. No variable of the institutional perspective has any influence on the dependent variable. Proportional systems are still related to regional diffusion, whereas no variable has any significant effect when mixed systems are compared to other systems. In addition to British legacy, cultural diversity is, surprisingly enough, significantly related to the adoption of plurality systems.

However, there is good reason to assume that the relationship between cultural diversity and electoral system choice is spurious. Certainly, the possibility of affirmative gerrymandering having taken place in several countries must not be rejected. By drawing constituency borders according to ethnic lines and concentrating minority groups to a few electoral districts, it is possible to provide representation of several minorities. In addition, many highly fragmented countries are agrarian societies, which, according to Barkan (1995), are better served by plurality systems than PR. He argues that the basic needs of the local community take precedence over ethnic cleavages when it comes to elections in agrarian societies.

Still, the main theoretical arguments contradict the observed pattern. If ethnic, linguistic and religious composition of the population matters to electoral system choice, fragmented countries should, contrary to the empirical findings, choose proportional systems. By looking around, further light is shed on the complex of problems. Among those 25 countries that are characterized by a high level of fragmentation, 14 have adopted plurality systems, whereas only five have adopted proportional systems. Cultural features do not, however, explain why these 14 countries have preferred plurality systems to other systems. Most of these systems were inherited from the colonial powers. The Philippines, Belau and the Federated States of Micronesia inherited their systems from the United States, whereas the United Kingdom exported SMP to Malaysia, Jamaica, Trinidad \& Tobago, Fiji, Dominica, and the Solomon Islands. In addition, 13 of totally 17 cases of low fragmentation are related to mixed or proportional systems. Accordingly, low-fragmented countries having
chosen mixed and proportional systems cause a great deal of the observed relationship between cultural diversity and electoral system choice.

Again, the most parsimonious model is rather similar to the first presented model in table 8.6. Electoral system choice in democracies is mainly explained by patterns of diffusion, i.e. British legacy and regional diffusion. However, temporal diffusion is of no importance in the democratic sample. Neither is French colonial legacy of any relevance in explaining electoral system choice among democracies. All values that measure the strength of the model as a whole are certainly improved if the model is enlarged with the cultural diversity variable, but because of the spurious relationship between cultural diversity and electoral system choice, there is no reason to pay further attention to such a model. Despite high Nagelkerke values in each comparison in table 8.6 and 8.7, associations between the variables are rather weak. This is largely due to the relatively small number of cases. Given these circumstances, more attention should be paid to the analysis of the total population. Nevertheless, the findings among democracies resemble those in the total data sample.

## 9. CONCLUSION

This study is a contribution to research on the determinants of electoral system choice. More specifically, the dissertation has focused on the contextual settings in which political actors make their decisions on electoral provisions. However, actor-related matters have been considered only to the extent that they involve structural dimensions as well. A broad design including independent variables from three competing as well as overlapping theoretical perspectives has been applied. The analyses show that the explanatory power of different factors varies considerably with regard to both general tendencies as well as patterns at different points in time.

The analysis is based on 268 cases of electoral system choice. 138 of these are first choices in (for the most part) newly independent countries, whereas the remaining 130 observations are cases of electoral system change. Considering that several authors have emphasized the 'stickiness' of electoral systems, in the sense that major changes of electoral rules are rare, the observed frequency of electoral reforms is surprisingly high. The permanent nature of electoral systems, as maintained, certainly concerns democratic countries only, but the findings in this study indicate that electoral reforms are almost as frequent in democracies as in non-democracies.

Plurality systems have been most popular during the analyzed time period - 1945 to 2003 - representing approximately 40 per cent of all cases. One fourth of the sample are proportional systems, whereas mixed systems represent one fifth of the population. 15 per cent of all cases are majority systems. List PR formulas are most frequent, followed by single-member plurality, block vote, two-ballot majority, and mixed-superposition. All other electoral formulas have been adopted rather infrequently. Single-member plurality and list PR dominate among democracies, the former having been slightly more popular than the latter. Mixed systems have been chosen almost as frequently as proportional systems under democratic circumstances. The pattern is somewhat different when electoral systems in the present world are observed. List PR is much more popular than SMP today - the number of countries that apply these formulas is 66 and 37 respectively. Only five countries use the block vote. Half of all democratic countries apply proportional systems, while few democratic elections are
conducted under the majority rule. Plurality systems are slightly more popular than mixed systems. In the following, the findings within each perspective and the multivariate analyses are discussed with reference to the theoretical framework.

### 9.1 The Rational Perspective

The rational perspective maintains that electoral systems serve certain purposes. Countries with different sociopolitical circumstances need different electoral systems in order to deal successfully with these traits. An electoral system may be a rational solution with regard to societal needs as well as a rational solution from the political actors' point of view. As a whole, the rational perspective provides a rather weak explanatory model. During the fourth period (1990-2003), however, this approach is of some importance in explaining electoral system choice.

Despite the fact that a lot of attention has been given to electoral system design in divided societies, electoral systems are rarely chosen by taking ethnic and other cleavages into consideration. Proportional systems are considered appropriate for countries with deep cleavages by securing representation of minority groups. The alternative vote is likewise regarded as a conflict-mitigating system, because it promotes accommodative behavior by means of vote-pooling. The share of electoral systems considered inappropriate is, nevertheless, much larger than the share of proportional systems and the alternative vote in plural societies. Of course, there is the possibility of affirmative gerrymandering having taken place in diverse countries with plurality systems, and thereby promoting representation of minority groups. However, there is probably also a large number of countries that have not taken such circumstances into consideration. In the multiple analyses of democratic cases, there is a significant relationship between cultural diversity and the adoption of plurality systems, but this pattern is overshadowed by the influence of British colonial legacy. The observed tendencies are, as a whole, somewhat stronger among democracies than in the total population.

The theoretical arguments concerning the influence of country size on electoral system choice suggest that small countries should apply proportional systems. Several reasons have been given, e.g. that the adoption of PR in small countries reflects a search for consensus and compromise, and that PR is disastrous in large entities because of their heavier burdens of responsibility. The empirical analysis
shows that countries having adopted PR are considerably smaller than countries with other electoral systems only during the fourth period. Moreover, this concerns democracies only. In all other respects, an opposite pattern is observed. There is a significant correlation between majoritarian systems and smallness - the relationship is even stronger in the democratic sample. The frequent adoption of plurality systems in small countries is considered a result of British colonialism, which comprised a lot of small island states. Accordingly, population size was excluded from the multivariate analysis of democratic cases. However, very large countries deviate from the general pattern by having chosen mostly majoritarian and mixed electoral systems. This tendency is most distinct during the fourth period. One advantage of these systems is that the use of single-member districts provides geographic accountability, i.e. it provides a link between constituents and their representatives. This matter becomes increasingly important in large countries. By using many small districts rather than a few large ones, the voters may still feel connected to those who represent them. Notwithstanding, it should be observed that this concerns only a few countries. In general, population size offers little explanation of electoral system choice.

The prevailing conditions in the negotiations between political actors on the choice of an electoral system are related to a structural dimension, namely the party system. The association between party systems and electoral system choice has been studied by means of two variables: party system structure and party system transformation. Concerning the level of party system fragmentation, the theory suggests that the presence of many relevant political parties should result in the adoption of proportional systems, whereas political party configuration dominated by a few parties should lead to the adoption of plurality systems. Associations were studied by observing cases of electoral system change. Countries that have replaced plurality systems with PR were compared to countries that have been applying plurality systems in several subsequent elections. A similar comparison was made between changes from PR to plurality and PR systems in general. Extended samples including cases of change to mixed systems were also analyzed.

The only significant relationship in the expected direction was found in the comparison between plurality systems and changes to mixed or proportional systems among democracies. Despite the negative findings in all other comparisons, this association is worthy of attention. First of all, when dealing with
party system structure, a stronger emphasis must be laid upon patterns among democratic countries. Moreover, all comparisons between changes from PR to plurality (or mixed systems) and PR systems in general are marred by a small number of changes away from PR. Thus, earlier statements concerning the rareness of electoral system change from PR to plurality systems are confirmed. The significant finding should, in other words, be regarded as an indication of party system structure having at least a minor influence on the choice of electoral systems. All cases that contribute to the significant relationship belong to the fourth period, thereby contributing to the importance of the rational perspective in recent times.

Party system transformation from absolute one-party rule to competitive politics in countries that previously have held elections under the majoritarian rule is assumed to result in the adoption of mixed systems or PR. This assumption builds upon the theory of the dynamic of the democratization process. In continental Europe a century ago, the established parties demanded PR in order to protect their position against the socialists who were supported by a lot of new voters created by universal suffrage. Most countries that conduct elections have applied universal suffrage during the postwar era. In this study, the dynamic of the democratization process is represented by the introduction of competitive, multi-party politics. The former ruling party may be afraid of losing all power if a majoritarian winner-takeall system is maintained. The new parties may, in addition, feel insecure about their possibilities of electoral success, and as a consequence, prefer proportional seat allocation.

Totally 62 cases of party system transformation are observed during the postwar era. In almost half of these, mixed or proportional systems have been adopted at the same time as the establishment of political parties has been permitted, or prior to the first multi-party elections. In another nine countries, electoral reforms have taken place in the expected direction between the first and second competitive parliamentary elections. Nearly all of these cases have occurred in the 1990s. Party system transformation is, in other words, a main determinant of electoral system choice during the fourth period. Even though no convincing evidence of the influence of the level of party system fragmentation on electoral system choice has been observed, we may, notwithstanding, conclude that the party system in general is relevant to explaining the adoption of electoral systems. There is hardly any
doubt that electoral systems affect party systems. However, the opposite is, at least to some extent, also true.

### 9.2 Culture and History: Patterns of Diffusion

The second perspective regards electoral systems as reflections of the cultural and historical contexts to which they belong. The adoption of electoral systems is seen as a consequence of influence from other societies rather than any specific circumstances in the country in question. Relationships have been studied by observing different types of diffusion. The impact of the cultural and historical setting is overwhelming, and all three variables are of considerable importance. Multiple patterns are practically speaking completely explained by different kinds of diffusion. Electoral system choice is, with reference to Weyland's theoretical framework of diffusion (2005), largely a consequence of cognitive-psychological insights, decision heuristics in particular. In fact, the results support his thesis that "...political science may soon be in for a cognitive-psychological turn" (2005: 295).

Numerous countries have inherited their electoral systems from the former colonial powers. The United Kingdom is associated with the largest share of inherited systems. The impact of British colonial legacy is confirmed in the multiple analysis, even though British legacy is by no means superior to other relevant determinants. It is also worth emphasizing that several patterns not supported by the main theoretical arguments are explained by British colonialism. More specifically, the United Kingdom has exported the single-member plurality formula and the block vote to several former colonies. Several former French colonies have also inherited their electoral systems from France. Both these conclusions have been made in previous studies. However, Reilly and Reynolds (1999: 23-24) assert that most of the former French colonies apply either the contemporary French system, i.e. two-ballot majority, or list PR, which France has used in some elections. This study shows that 15 of 16 inherited electoral systems from France are the block vote, which the French introduced to several colonies although they did not apply it for national elections themselves. Consequently, the occurrence of list PR and TBM, with the exception of the Comoros, in former French colonies today is not attributed to French colonialism.

French colonial legacy is also of some importance in explaining electoral system choice but not to the same extent as British legacy. Among democracies, however, a French legacy does not exist, because only two French colonies were democratic when independence was proclaimed. The number of electoral systems initiated by the British is, after all, more than twice as large as the number of systems exported from France. The fact that block vote is not a popular electoral formula anymore may be seen as an indicator of French legacy not being as deep-rooted and strong as British legacy that is still visible in the world today. The impact of British colonial rule has been regarded as positive and developmental in several ways, whereas the rule by several other colonial powers has been considered intrusive and exploitative. These circumstances probably explain why several former colonies have preferred other systems than those of their former masters. In this connection, it may be pointed out that all four countries previously under American colonial rule, which is considered as reminiscent of British colonialism, adopted plurality systems.

Transfer of institutions has taken place from other countries than colonial powers as well. The regional diffusion variable deals with the imitation of electoral system choices in neighboring countries. In the difficult process of constitution making, it is natural to look for arrangements in culturally similar countries, and make similar decisions as they have. The empirical analyses provide support for the theoretical arguments. On the basis of a few specified criteria, slightly more than one third of all adopted electoral systems between 1945 and 2003 qualify as cases of regional diffusion. The frequency is somewhat lower among democracies. In order to avoid over-determination, inherited systems are disqualified as cases of imitating neighboring countries. Regional diffusion is primarly associated with the adoption of proportional systems, mostly in Europe and Latin America. Another finding is that several countries that were formerly part of the Soviet Union have adopted similar electoral systems, i.e. mixed-superposition. One can hardly believe that all these societies are in need of this particularly system; it has probably been chosen because of a prevailing perception in that region that this system is superior to other systems. Hence, the findings concerning regional influence emphasize the role of cognitive heuristics as the logic behind policy adoptions in general and institutional choices in particular. The unique availability of electoral reforms implemented in the neighborhood often puts similar reforms on the agenda in several other countries of the same region.

The third variable within the cultural and historical perspective is temporal diffusion, which regards the choice of electoral systems as an epoch phenomenon, dependent on specific trends. This assumption builds upon the observation that patterns of electoral system choice correspond to the three waves of democratization. The first wave ended already in the 1920s and is consequently not relevant to this study. Colonial heritage of electoral systems characterized the second wave. In addition, Reilly and Reynolds argue (1999: 8-9), some electoral systems were externally imposed by foreign powers. The central feature of the third wave is deliberate electoral system design. Farrell (2001: 179) regards the growing number of electoral system reforms as a new 'fourth wave' of electoral system choice.

The findings in this study confirm these observations to a great extent. However, in contrast to the categorization of waves above, the exposition of electoral system choice over time results in a classification into four distinct periods during the postwar era, characterized by few adopted systems at the end of each period. The second phase of this analysis consisted of examining which systems have been the most popular during each period. Plurality systems have been frequently adopted during the first three periods, i.e. from 1945 to 1989, but have lost popularity during the fourth period. Mixed systems show the opposite pattern: after having been rather unpopular before 1990, they represent one third of all choices during the fourth period. Proportional systems have also been frequently adopted in recent times. More than half of all majority systems has been adopted since 1990. The findings among democracies resemble those in the total data sample. The multivariate analyses show that temporal diffusion has a significant effect on electoral system choice. More specifically, temporal diffusion is related to the frequent adoption of mixed systems during the fourth period. The findings with regard to regional and temporal diffusion supports Weyland's remark that changes next door are immediately available and grab the attention of decision-makers the temptation to consider similar reforms is practically irresistible (2005: 294).

However, the fact that a given electoral system is very frequently adopted during a certain epoch does not sufficiently explain why this electoral system is chosen. It is probably preferred to other systems because several other countries have recently adopted that system but the value of temporal diffusion as a theoretical explanation
is limited. The third step in the analysis of temporal diffusion was therefore to examine whether different explanations apply to different epochs of electoral system choice. Regional diffusion is the most important variable during the first period from 1945 to 1955 . The impact of colonial and regional diffusion is immense during the second period between 1956 and 1969. Almost every adopted plurality system at that time is a consequence of either colonial legacy or regional influence. Party system transformation is of some importance between 1970 and 1989. Colonial and regional diffusion are nonetheless the main determinants also during the third period. Surprisingly enough, regional diffusion is related to the adoption of plurality systems rather than PR. The rational perspective is a relevant explanatory model during the fourth period from 1990 to 2003. Especially party system transformation is related to the adoption of mixed and proportional systems. Population size and party system structure may also explain the introduction of mixed systems in some countries. Only a few colonies became independent during the fourth period. Regional diffusion, in contrast, is still an important variable related to mixed and proportional systems. Some tendencies concerning the adoption of other institutions and electoral system choice are also discernable at different points in time but they are, at least partly, a consequence of British colonialism.

### 9.3 The Institutional Perspective

The third perspective sees the adoption of electoral institutions as a consequence of other characteristics of the constitutional framework. Some institutional arrangements follow logically upon others and together they constitute a coherent whole. However, the perspective rests upon a rather weak theoretical basis, and the empirical findings are negative. The analysis of form of government and electoral system choice certainly returns a significant bivariate relationship, indicating among other things that the combination of parliamentarism and plurality systems is very common. Nevertheless, this finding probably reflects the influence of the British political system rather than a causal relationship between parliamentary form of government and plurality electoral systems. No relationships appear in the analyses of territorial organization and chamber structure on the one hand and the choice of electoral systems on the other. Some institutional choices may certainly be dependent on other particular institutions, but the choice of electoral systems is not connected to the choice of other political institutions.

### 9.4 Final Remarks

The impact of the cultural and historical setting on the dependent variable of the study is tremendous. With evidence from the rational approach and the analysis of patterns of diffusion, it is easy to agree with Weyland when he points out that several countries "...import the basic policy framework without thoroughly assessing its fit with their specific requirements and needs" (2005: 271). Not until the 1990s are patterns of diffusion challenged by the rational perspective in explaining electoral system choice. It should be repeated that the different perspectives applied in the study overlap to some extent. For instance, the multivariate analyses suggest that regional and temporal forms of diffusion are related to the adoption of proportional and mixed systems respectively. However, some of the PR and mixed cases involved may simultaneously be caused by party system transformation. The same applies to cases that support the, albeit minor, influence of population size and party system structure on electoral system choice. In practice, the adoption of an electoral system may often be a consequence of several factors, mutually reinforcing each other.

The increased importance of rational explanations and the decrease of colonial legacy as a determinant of electoral system choice during the last two decades bring about a prediction that these trends will continue in the future. A majority of the former British colonies will probably continue applying the single-member plurality formula for a long time to come, thereby keeping the British colonial legacy alive, but its relative strength is likely to decline. It is nevertheless worth emphasizing that the importance of British legacy relative to other determinants is not as prodominant as the literature on the origin of electoral systems often maintains. Furthermore, on the basis of the findings in this study, deliberate electoral system design has not been as frequent during the third wave of democratization as some authors suggest. Notwithstanding, the extent to which electoral systems are carefully chosen on the basis of an extensive debate will probably increase in years to come. Factors related to party systems and ethnic diversity are likely to influence electoral system choice in the future. An element of regional diffusion will most likely be present in the future as well, because there has always been a tendency to imitate the institutional choices of immediate neighbors.

Proportional systems will continue to be popular, because they provide a rather stable parliamentary arena for the parties involved, thereby making the replacement of PR systems with especially majoritarian systems rare. The popularity of the single-member plurality formula depends on whether several autonomous British and American territories will become independent or not. In most countries implementing electoral reforms in the future, the formula will hardly be considered a real option. The other plurality formulas are already quite rare in the world. An increase in the popularity of the two-ballot majority formula is not likely. Most of the existing cases are non-democracies in Africa, Caucasus and Central Asia. Possible democratization processes in these countries are likely to result in the replacement of two-ballot majority with more inclusive electoral provisions, which has already taken place in several other countries in these regions. The alternative vote will hardly be very popular in the future, because it has always been regionally restricted to the South Pacific. Mixed systems in general, and superposition, also called mixed-member majoritarian, in particular, have been frequently adopted in recent years. The apparent question is whether the popularity of mixed systems with an independent combination of plurality/majority and PR will persist. The popularity might well continue for a while, but a plausible scenario is that more and more countries will come to agree with Sartori (1994: 75) who has described these mixed systems as a bastard-producing hybrid that combines the defects of majoritarian and PR systems. A logical consequence of this insight is to introduce a corrective mechanism to the mixed system, or to replace the hybrid with a proportional list system.

## APPENDIX I

## Classification of countries that have adopted electoral systems between 1945 and 1974 into

 democracies and non-democracies
## Brazil - List PR 1945

Brazil replaced its mixed system with list PR in 1945 (Lamounier and Muszynski 1993: 132135). According to Vanhanen's ID, some degree of democracy (ID 6.38) resulted from the 1945 elections. Before that, however, Brazil scores 0 in the Polyarchy dataset. Consequently, Brazil was non-democratic when list PR was adopted in 1945.

## France - List PR 1945

France introduced a pure proportional system for the first time in 1945. TBM had been used in every election since 1928 (Flora, Kraus and Rothenbacher 2000: 322). France has consistently been democratic since the late nineteenth century and is, accordingly, regarded a democracy in 1945.

## Ecuador - List PR 1946

Ecuador introduced list PR in 1946 after having used a plurality system since 1861 (for direct legislative elections). The country was subjected to José Ibarra's dictatorship until 1947, and scores 0 in the Polyarchy dataset between 1944 and 1947 (Juárez and Navas 1993: 291-320). Consequently, Ecuador was not democratic in 1946.

## Vietnam - BV 1946

Vietnam became independent in 1945 and held its first direct national elections in 1946 (Hartmann 2001e: 321-324). Despite regular elections since 1946, Vietnam has never experienced democracy.

## Japan - SNTV 1946

Japan adopted SNTV along with a new constitution in 1946. The first democratic elections were held in 1947 (Klein 2001: 355-363). Before that, Japan does not score higher than 2.54 in the Polyarchy dataset. Accordingly, Japan was not democratic in 1946.

## Venezuela - List PR 1946

Venezuela introduced list PR in 1946. Indirect elections had been held before that (Thibaut 1993: 779-790). Thus, Venezuela was not a democracy prior to the 1947 elections.

## Turkey - BV 1946

The 1946 electoral law in Turkey introduced direct elections based on BV (Schüler 2001: 233248). Before the parliamentary elections the same year, Turkey scores 0 in the Polyarchy dataset; thereby being a non-democracy when BV was adopted.

## Guatemala - Mixed-coexistence 1946

Guatemala adopted a mixed system in 1946. The last elections had been held in 1944, after which a military junta continued until 1945. In 1945 a somewhat liberal constitution was adopted
(Bendel and Krennerich 1993a: 359-388). During the period 1944-1949, the country scores 1.55 in the Polyarchy dataset. Guatemala is not considered a democracy in 1946.

## Philippines - BV 1946

The Philippines became independent in 1946. The country had had electoral experience since 1907 and democracy evolved gradually. In the parliamentary elections 1946 and 1949, the electoral provisions stayed basically the same as stipulated in the 1935 Constitution and/or Electoral Code (Hartmann, Hassall and Santos Jr. 2001: 185-238). The country scores 5.99 in the Polyarchy dataset in 1946. I regard the Philippines as democratic that year.

## Taiwan - SNTV 1946

The principles of universal, equal, direct, and secret suffrage were introduced in the Taiwanese Constitution of 1946. The first direct elections were held the following year under SNTV (Rinza 2001: 528). Accordingly, Taiwan was not democratic in 1946.

## Paraguay - List PR 1947

Paraguay replaced the plurality system with list PR in 1947 (León-Roesch 1993: 631-650). Paraguay scores 0 in the Polyarchy dataset during the 1940s because of military rule; thus, being non-democratic when the electoral system was adopted.

## Jordan - SMP-BV 1947

The 1947 Electoral Law stipulated that the plurality system in single- and multi-member districts should be used in national elections (Dieterich 2001: 141-145). During the period from 1946 to 1950, Jordan scores 0 in the Polyarchy dataset. Hence, Jordan was not democratic in 1947.

## Burma - BV 1948

According to the 1947 Burmese Electoral Law, elections to the Chamber of Deputies were to be held under the plurality system in single- and multi-member constituencies (Frasch 2001: 600). Burma (Myanmar) has never experienced democracy.

## Israel - List PR 1948

The first parliamentary elections in independent Israel were held in 1949. However, Israel had had a long tradition of competitive elections when independence was proclaimed in 1948. The last elections had been held in 1944 (Ries 2001: 109-140). I regard Israel as democratic in 1948.

## North Korea - OBM 1948

The electoral provisions, laid down in the Constitution of 1948, stipulates that elections must be held according to the absolute majority system in single-member constituencies in one round (Suh 2001: 398-402). North Korea has never experienced democracy.

## South Korea - SMP 1948

The first parliamentary elections in South Korea were held in 1948 under SMP (Croissant 2001: 411-429). Due to the elections, South Korea experienced some democracy from 1948 to 1960, but the electoral system choice was made in non-democratic circumstances.

## Sri Lanka - SMP 1948

The Constitution of 1946 paved the way for independence in Ceylon (Sri Lanka 1972-). However, the first elections were held already in 1910, and universal suffrage was introduced in 1931 (Wagner 2001: 697-702). Due to the elections in 1947, Ceylon scores 15.99 in the Polyarchy dataset 1948-1951. I regard Ceylon as a democracy when SMP was chosen.

## East Germany - BV 1949

East Germany was never a democracy.

## West Germany - Mixed-corrective 1949

The Federal Republic of Germany was established in 1949. The first elections were held the same year under the mixed-corrective system. However, the electoral system choice preceded democracy.

## Mongolia - TBM 1949

Direct elections were introduced in 1949. All elections until 1990 were non-competitive (Gluckowski and Grotz 2001: 484-495). Accordingly, Mongolia was not a democracy when TBM was chosen.

## Egypt - TBM 1950

The first reported elections in Egypt were held in 1950 under TBM (Ries 1999: 329-350). The country scores 0 in the Polyarchy dataset 1922-1955. Thus, Egypt was not democratic when TBM was chosen.

## Syria - TBM 1947

The 1947 Electoral Law introduced the principle of direct elections in Syria. Elections were held under TBM (Zisser 2001: 216-218). Syria scores 4.8 in the Polyarchy dataset between 1947 and 1951. I consider Syria as non-democratic in 1947, because women were not entitled to vote.

## India - SMP-BV 1950

India received Dominion status from Britain in 1947, and with the Constitution of India in 1950, it became a republic. Although the evolution of democracy started under the British colonial rule, the franchise was still very restricted in the 1946 elections. The first general elections under universal adult suffrage were held in 1951-1952 (Enskat, Mitra and Singh 2001: 561-563). India scores 1.77 in the Polyarchy dataset from 1947 to 1951 . Accordingly, the country was not democratic when the electoral system of independent India was chosen.

## San Marino - List PR 1951

The first reported elections in San Marino were held in 1951 under list PR [http://www.parties-and-elections.de/indexe.html]. Consequently, I regard the choice of list PR as non-democratic. San Marino is not noted in the Polyarchy dataset.

## France - Mixed-conditional 1951

After having received list PR in 1945 and twice in 1946, France introduced a mixed-conditional system in 1951. France has been a democracy since the late nineteenth century.

## Libya - SMP 1951

Libya held five direct parliamentary elections between 1952 and 1965 under the SMP formula as proclaimed in the 1951 Electoral Law (Mattes 1999: 523-527). None of them, however, met any democratic standards.

## Iraq - TBM 1952

The first direct elections in Iraq were held in 1953, according to the Electoral Decree of 1952, under TBM (Axtmann 2001: 89-92). No Iraqi elections have met democratic standards. As a consequence of the 1953 elections, Iraq scores 4.53 in the Polyarchy dataset. Every other year, however, Iraq's ID is 0 .

## Greece - SMP 1952

Greece replaced list PR with SMP in 1952 (Flora, Kraus and Rothenbacher 2000: 471). As a result of the 1951 elections, Greece scored 14.16 in the Polyarchy dataset. After the 1952 elections, its ID value was 10.46 . With the exception of military rule in 1967-1974, Greece has been considered a democracy during the postwar era.

## Italy - Mixed-conditional 1953

Italy introduced a mixed system for the 1953 parliamentary elections after having applied list PR in 1946 and 1948 (Flora, Kraus and Rothenbacher 2000: 617). Italy scores 29.61 between 1948 and 1952 as a result of the 1948 elections. Accordingly, Italy was a democracy in 1953.

## Bulgaria - List PR 1953

In 1953, list PR was introduced for the last multi-party parliamentary elections in Communist Bulgaria (Birch et al 2002: 112). During the period 1949-1953, Bulgaria scores 1.51 in the Polyarchy dataset. Consequently, Bulgaria was not democratic when the electoral system was adopted.

## Lebanon - BV 1953

After having applied TBM between 1943 and 1951, Lebanon introduced BV in 1953 (Scheffler 2001: 173-176). Several authors have regarded Lebanon a democracy from 1943 until the civil war broke out in the 1970s (see e.g. Huntington 1991: 14-16; Lijphart 2002: 41). As a result of the 1951 elections, Lebanon scores 8.15 in the Polyarchy dataset. I consider the choice of BV in 1953 as democratic.

## Indonesia - List PR 1953

The first electoral law of independent Indonesia was enacted in 1953 (Rüland 2001: 83-89). From independence in 1945 to the first elections as an independent country in 1955, Indonesia scores 0 in the Polyarchy dataset. Despite experience of pre-independence elections, Indonesia was not a democracy when list PR was chosen.

## Cambodia - SMP 1953

Direct parliamentary elections were introduced in 1946, in accordance with the Electoral Law. SMP was applied in elections between 1955 and 1966 (Hartmann 2001b: 57). Despite regular elections, Cambodia has never experienced democracy.

## Laos - SMP-BV 1953

Laos achieved full independence in 1953. Electoral provisions had existed since 1947, the same year as the first parliamentary elections were held (Hartmann 2001d: 129-135). Laos has never experienced democracy.

## Italy - List PR 1954

After having used a mixed system in the 1953 elections, Italy reintroduced list PR in 1956 by restoring the former electoral law (Mackie and Rose 1974: 210). Italy has been a democracy since World War II.

## Ethiopia - BV 1955

In 1955, Ethiopia adopted a constitution that provided for direct national elections under the plurality formula in two-member districts. The first direct elections were held in 1957 (Meier 1999: 375-377). Ethiopia scores 0 in the Polyarchy dataset until 1995.

## South Vietnam - SMP 1956

The Republic of Vietnam (South Vietnam) was established in 1954. The 1956 Constitution stipulated that elections should be held under SMP (Hartmann 2001e: 326). South Vietnam was never a democracy.

## Sudan - SMP 1956

Sudan became independent in 1956. The first independent elections were held in 1958. In accordance with the 1953 Electoral Law, revised on the eve of the elections in 1958, SMP was applied (Fleischhacker and Doebbler 1999: 843-851). As a result of the 1953 pre-independence elections, Sudan scores 3.87 in the Polyarchy dataset 1956-1958. However, Sudan has never been considered a democracy.

## Bulgaria - TBM 1956

Bulgaria reintroduced TBM in 1956. The country was not democratic during its Communist era.

## Bolivia - List PR 1956

After having applied SMP-BV since 1924, Bolivia adopted list PR in 1956 (Hofmeister and Bamberger 1993: 101-107). As a consequence of the 1956 national elections, the country exceeded the threshold of democracy according to Vanhanen's ID by scoring 5.04 from 1956 to 1959. Before that, however, Bolivia scores 2.34 in the Polyarchy dataset. With the exception of Huntington's assessment (1991: 14-19), Bolivia has not been considered a democracy before the 1980s. I regard Bolivia as non-democratic when list PR was adopted.

## Guatemala - List PR 1956

In the 1957 Guatemalan parliamentary elections, pure list PR was applied for the first time in accordance with the 1956 Constitution (Bendel and Krennerich 1993a: 364-365). Between 1955 and 1957, Guatemala scores 0 in the Polyarchy dataset. Accordingly, Guatemala was not a democracy when list PR was adopted.

## Greece - Mixed-coexistence 1956

Greece introduced a mixed system in one tier for the 1956 elections (Flora, Kraus and Rothenbacher 2000: 471). As a result of the previous elections in 1952, Greece scores 10.46 in the Polyarchy dataset from 1952 to 1955. I consider the electoral system choice as democratic.

## Argentina - List PR 1957

Argentina replaced SMP with list PR in 1957. During the 1950s and the 1960s, Argentina experienced some degree of democracy. In 1955, however, a coup d'état took place, and as a consequence, the country scores 0 in the Polyarchy dataset 1956-1957 (León-Roesch and Samoilovich 1993: 29-75). Thus, Argentina was not democratic when list PR was introduced.

## Honduras - List PR 1957

After having applied TBM since 1895, Honduras introduced list PR in 1957 (Bendel 1993: 423445). Between 1955 and 1970, Honduras scores 0 in the Polyarchy dataset. Accordingly, the country was not a democracy when list PR was adopted.

## Ghana - SMP 1957

The first elections in Ghana were held in 1956, one year before independence was received, under the SMP formula. As a result of the 1956 elections, the country scores 4.98 in the Polyarchy dataset from 1957 to 1959 . However, the decision on the electoral system was taken in non-democratic circumstances.

## Malaysia - SMP 1958

The first parliamentary elections in Malaysia were held in 1955, two years before independence was proclaimed from Britain. The Elections Act 1958 stipulated that national elections should be held under SMP, the same formula that was used in the 1955 elections. Malaysia scores 3.11 in the Polyarchy dataset 1957-1958, and 11.13 as a result of the 1959 elections. According to the threshold of democracy in the Polyarchy dataset, Malaysia has been a democracy ever since. According to the general description of the politics in Malaysia (Tan 2001: 143-151), democratic standards were met after the first elections in 1955. With the exception of emergency rule in 1969-1971, the nature of the politics stayed the same until the late 1980s. According to the Freedom House ratings, Malaysia was a democracy between 1972 and 1987. Consequently, I regard the choice of SMP in 1958 as democratic.

## Monaco - TBM 1958

The first reported parliamentary elections in Monaco were held in 1958 [http://www.parties-andelections.de/indexe.html]. Monaco was not a democracy when TBM was adopted prior to the 1958 elections.

## France - TBM 1958

France reintroduced TBM in 1958 (Flora, Kraus and Rothenbacher 2000: 322). The country has been a stable democracy throughout the twentieth century.

## Greece - List PR 1958

After having applied a mixed system in the 1956 elections, Greece reintroduced list PR for the 1958 elections (Flora, Kraus and Rothenbacher 2000: 467). With the exception of the period between 1967 and 1974, Greece has been a democracy during the postwar era.

## Nepal - SMP 1958

The People's Representation Act of 1958 provided for direct national elections under SMP. The first direct Nepalese elections were held the following year (Krämer 2001: 624). Nepal was not democratic when SMP was adopted.

## Iceland - List PR 1959

Iceland replaced the mixed system with list PR in 1959 (Flora, Kraus and Rothenbacher 2000: 527). The country scores 29.49 between 1956 and 1958 in the Polyarchy dataset, and has been regarded a democracy during the postwar era.

## Tunisia - BV 1959

The first Electoral Law of independent Tunisia was enacted in 1959, providing for direct parliamentary elections under BV (Pereira 1999: 913). Tunisia scores 0.05 in the Polyarchy dataset from 1956 to 1963, and has never been democratic.

## Niger - BV 1960

The 1959 Constitution provided for adult, universal and direct suffrage. The first parliamentary elections in independent Niger were held in 1965 under BV (Basedau 1999b: 677-682). Niger scores 0 in the Polyarchy dataset until 1993.

## Benin - BV 1960

Benin held multi-party elections in 1959 and 1960 (Hartmann 1999a: 79-95). As a consequence of the 1960 elections, Benin scores 10.11 between 1960 and 1963 in the Polyarchy dataset. However, the electoral system was introduced before the 1959 elections and, consequently, this decision was not made under democratic circumstances.

## Cameroon - BV 1960

The first parliamentary elections in independent Cameroon were held in 1964 under BV (Mehler 1999a: 167-173). Elections were also held in 1956 and 1960 in the French mandate and in 1959 and 1961 in the British mandate. Cameroon scores 21.63 in the Polyarchy dataset from 19601963. However, the electoral system was introduced before the 1960 elections were held. Accordingly, Cameroon was not a democracy when BV was adopted.

## Central African Republic - BV 1960

The first parliamentary elections in the Central African Republic were held in 1957 and the second elections were held in 1959, one year before independence was declared. BV was used in both elections (Mehler 1999b: 207-208). The country scores 0 in the Polyarchy dataset between 1960 and 1963. Consequently, the Central African Republic was not a democracy when BV was introduced.

## Chad - BV 1960

The first elections in independent Chad were held in 1962 under BV (Römer 1999: 221-227). As a result of the pre-independence elections in 1959 under the same system, Chad scores 6.07 in the Polyarchy dataset. However, the decision on the electoral system was taken in nondemocratic circumstances.

## Congo (-Brazzaville) - BV 1960

The Constitution of 1959 provided for parliamentary elections under BV. Pre-independence elections were held in 1959 and the first elections in the independent state were held in 1963 (Fleischhacker 1999a: 259-265). As a result of the 1959 elections, the country scores 19.42 in the Polyarchy dataset in 1960. Still, the decision on the electoral system was taken in nondemocratic circumstances.

## Congo (-Kinshasa) - List PR 1960

The first elections to the National Assembly of Congo (-Kinshasa) were held in May 1960, one month before independence was proclaimed. The elections were conducted under list PR according to the Loi Fondamentale passed by the Belgian Parliament (Schmidt and Stroux 1999: 281-293). Due to the 1960 elections, Congo scores 13.72 in the Polyarchy dataset. Notwithstanding, the decision on the electoral system was taken under non-democratic circumstances.

## Cote d'Ivoire - BV 1960

Multi-party elections were held for the Territorial Assembly of Ivory Coast in 1957, three years before independence was achieved from France. Another election was held in 1959 and the first parliamentary elections after independence took place in 1960 (Hartmann 1999b: 301-306). Before 1990, however, Ivory Coast scores 0 in the Polyarchy dataset. Despite multi-party elections in 1957, hence, Ivory Coast was not a democracy when BV was chosen.

## Cyprus - BV 1960

Cyprus attained independence in 1960, and the first elections of independent Cyprus took place the same year. Competitive multi-party elections had been held long before that as well. The country scores 15.16 in the Polyarchy dataset as a consequence of the 1960 elections. I regard Cyprus a democracy when BV of independent Cyprus was adopted.

## Laos - TBM 1960

Laos replaced the plurality system with TBM in 1960 (Hartmann 2001d: 132). Laos has never been a democracy.

## Gabon - BV 1960

The Constitution of 1959 established a 40-member Parliament, elected under BV. Parliamentary elections had been held already in 1957 as a result of the Loi Cadre in 1956 (Fleischhacker 1999b: 387-395). The following elections were held in 1961. Gabon scores 17.52 in the Polyarchy dataset in 1960. Accordingly, the electoral system was adopted by a democratically elected leadership.

## Madagascar - Super-mixed 1960

The 1959 Electoral Law of Madagascar provided for a mixed system. Provincial elections had also been held in 1957 in accordance with the Loi Cadre (Thibaut 1999: 531-537). The first parliamentary elections of independent Madagascar in 1960 resulted in ID 3.21 in the Polyarchy dataset. I consider Madagascar a non-democracy when the super-mixed system was adopted.

## Mali - BV 1960

The first elections in Mali under universal suffrage were held in 1957, three years before independence was declared. The electoral provisions of Loi Cadre 1956 were retained when independence was received. As a consequence of the second elections in 1959, Mali scores 4.26 in the Polyarchy dataset between 1960 and 1963. I regard Mali a non-democracy when BV was adopted.

## Mauritania - SMP 1960

Mauritania received independence in 1960. The first competitive elections were held in 1992 (Wegemund 1999: 585-590). Accordingly, the choice of SMP was taken in non-democratic circumstances.

## Nigeria - SMP 1960

Nigeria became independent in 1960, one year after the first elections under universal, equal and direct elections had been held. SMP has been applied ever since (Bendel 1999b: 697-703). As a consequence of the 1959 elections, Nigeria scores 11.97 in the Polyarchy dataset from 1960 to 1964. However, the decision on the electoral system was taken in non-democratic circumstances.

## Togo - SMP 1960

Togo proclaimed independence in 1960, two years after the first general elections were held. The Election Law of 1958 provided for a 46-member Parliament elected under SMP (Stroux 1999: 891-898). Togo scores 8.61 in the Polyarchy dataset in 1960 as a consequence of the 1958 elections. The decision on the electoral system was taken in non-democratic circumstances.

## Turkey - List PR 1961

Turkey replaced SMP with list PR in accordance with the 1961 Constitution (Schüler 2001: 236242). As a result of the 1957 elections, Turkey scores 19.14 in the Polyarchy dataset between 1957 and 1960. I regard Turkey a democracy when list PR was introduced.

## Sierra Leone - SMP 1961

The first parliamentary elections in independent Sierra Leone were held in 1962 under SMP. The principles of universal, equal and direct elections had been applied already in 1957 (Reynolds 1999b: 789-795). As a consequence of these elections, Sierra Leone scores 4.13 in the Polyarchy dataset in 1961. I regard Sierra Leone as non-democratic when SMP was chosen.

## Kuwait - BV 1962

In accordance with the 1962 Electoral Law, Kuwaiti parliamentary elections have been held under BV (Koch 2001: 155-161). Kuwait has never been a democracy.

## Morocco - List PR 1962

Morocco's Constitution of 1962 provided for a Chamber of Deputies elected under list PR. The first direct parliamentary elections in Morocco were held the following year (Pereira and Fernández 1999: 623-630). Morocco scores 0 in the Polyarchy dataset from 1956 to 1962.

## Algeria - BV 1962

The first Algerian elections for a Constitutional Assembly were held in 1962, the same year as independence was attained (Axtmann 1999: 41-47). Algeria scores 0 in the Polyarchy dataset in 1962; thus, being non-democratic.

## Jamaica - SMP 1962

Jamaica became independent in 1962. However, direct parliamentary elections had been held already since 1944 (Sturm 1993: 447-452). The country scores 17.32 in the Polyarchy dataset between 1962 and 1966. I regard Jamaica a democracy when the Constitution and the Electoral Law of 1962 were adopted.

## Dominican Republic - list PR 1962

The Dominican Republic adopted a new electoral law in 1962. The first elections under list PR were held the same year (Barrios 1993: 259-267). As a result of the elections, the country scores 13.08 in the Polyarchy dataset. Before that and immediately after, however, its ID value is 0. Accordingly, the Dominican Republic was not a democracy when list PR was chosen.

## Nicaragua - Mixed-fusion 1962

In 1962, Nicaragua introduced a mixed system for parliamentary elections (Krennerich 1993b: 580-584). As a result of the previous elections in 1957, Nicaragua scores 2.97 in the Polyarchy dataset between 1957 and 1962. Nicaragua was not a democracy before the late 1980s.

## Rwanda - List PR 1962

Electoral provisions were set down in the 1962 Constitution, providing for elections under list PR. The first elections in independent Rwanda were held in 1965. Elections had been held in 1961 as well (Stolz 1999: 729-731). Rwanda scores 0 in the Polyarchy dataset between 1962 and 1977, and has never been a democracy.

## Trinidad and Tobago - SMP 1962

Trinidad and Tobago became independent in 1962. The 1962 Constitution provided for direct parliamentary elections under SMP. Competitive elections had been held also in 1956 and 1961 (Hillebrandt 1993f: 719-729). As a result of the 1961 elections, the country scores 16.43 in the Polyarchy dataset. I regard Trinidad and Tobago as a democracy when SMP was chosen.

## Kenya - SMP 1963

Kenya proclaimed independence in 1963. General elections under SMP had been held earlier the same year. These were the first elections under universal, direct and equal suffrage (Hartmann 1999c: 475-482). As a result of the elections, Kenya scores 9.65 in the Polyarchy dataset. However, the decision on the electoral system was taken in non-democratic circumstances.

## Iran - SMP-BV 1963

In 1963, Iran adopted an electoral law that provided for direct parliamentary elections under a plurality system (Kauz, Sharoudi and Rieck 2001: 57-64). Iran has never been a democracy.

## Guinea - BV 1963

The Electoral Law of independent Guinea was enacted in 1963, providing for parliamentary elections under BV (Brüne 1999: 447-451). Guinea scores 0 in the Polyarchy dataset from 1958 to 1992 , and has never been a democracy.

## Senegal - BV 1963

The first Electoral Law of independent Senegal was enacted in 1963. Despite a long history of parliamentary elections, true democratic standards have never been met (Bendel 1999: 755-762). As a result of the 1959 elections, Senegal scores 4.59 in the Polyarchy dataset from 1960 to 1962. I regard Senegal as non-democratic when BV was adopted.

## El Salvador - List PR 1963

El Salvador replaced BV with list PR in 1963 (Krennerich 1993a: 325-327). The country scores 1.19 in the Polyarchy dataset between 1962 and 1966. Consequently, El Salvador was not a democracy when list PR was adopted.

## Mexico - Mixed-corrective 1963

Mexico introduced a mixed system in 1963 after having applied SMP since 1912 for direct elections (Fernández and Nohlen 1993: 537-557). As a result of the previous elections in 1961, Mexico scores 2.13 in the Polyarchy dataset. Mexico was not a democracy when the mixed system was chosen.

## South Korea - Mixed-superposition 1963

South Korea adopted a mixed system in 1963 after having used SMP since independence (Croissant 2001: 414-416). As a result of the elections held the same year, South Korea experienced a short period of democracy. However, South Korea was not democratic when the mixed system was chosen. The country scores 0 in the Polyarchy dataset 1961-1962.

## Benin - List PR 1964

Benin introduced list PR in 1964 after having used SMP in 1959 and 1960. As a result of the 1960 elections, Benin scores 10.11 in the Polyarchy dataset from 1960 to 1964. However, according to the general description of the political situation in Benin, I consider the country a non-democracy in 1964 (Hartmann 1999a: 79-85).

## Somalia - List PR 1964

Somalia adopted list PR in 1964. As a consequence of the 1960 elections, Somalia scores 7.02 in the Polyarchy dataset from 1960 to 1963 , and as high as 18.02 after the 1964 elections. According to the general description of the political situation in Somalia, I nonetheless consider the country a non-democracy when list PR was chosen in 1964 (Krennerich 1999b: 803-808). Somalia has never been regarded as democratic.

## Western Samoa - SMP-BV 1963

Elections to the Samoan Parliament have been held since 1873. The first elections in independent Western Samoa were held in 1964. All parliamentary elections ever since have been conducted under SMP-BV. The country was not a democracy when the 1963 Electoral Act was introduced, because the franchise was very limited (So'o 2001: 779-785). Western Samoa scores 2.8 in the Polyarchy dataset between 1962 and 1975.

## Malawi - SMP 1964

Two pre-independence elections were held in Malawi (Meinhardt 1999: 549-553). Malawi scores 0 in the polyarchy dataset from 1964 to 1983. Consequently, Malawi was not a democracy when SMP was chosen.

## Malta - STV 1964

When independence was achieved in 1964, Malta had already experienced several decades of democracy. Malta scores 26.45 in the Polyarchy dataset 1964-1965. Democracy prevailed when STV was adopted in independent Malta.

## Tanzania - SMP 1964

The first elections in independent Tanzania were held under SMP in 1965. Several elections had taken place in Tanganyika and Zanzibar between 1957 and 1963. None of them, however, met democratic standards (Fengler 1999: 871-876). Tanzania scores 0.09 in the Polyarchy dataset 1964. Accordingly, Tanzania was not a democracy when SMP was adopted.

## Zambia - SMP 1964

The principles of universal, equal and direct suffrage was introduced in 1963, and preindependence elections were held in 1964 (Krennerich 1999c: 939-945). As a result of these elections, Zambia scores 1.85 in the Polyarchy dataset between 1964 and 1967. Zambia was not a democracy when SMP was chosen.

## Gambia - SMP 1965

From independence in 1965 to the coup d'état in 1994, The Gambia was one of only a few stable democracies in Africa. However, no elections are reported before the adoption of the 1965 Constitution, which provided for national elections under SMP (Bendel 1999a: 411-416). Accordingly, The Gambia was not a democracy when SMP was chosen.

## Burundi - SMP 1965

In 1965, the first electoral provisions of independent Burundi, providing for national elections under SMP, were adopted. Pre-independence elections had been held in 1961 under a proportional system (Basedau 1999a: 153-158). As a result of the 1961 elections, Burundi scores 4.98 between 1961 and 1965 in the Polyarchy dataset. I regard Burundi a non-democracy when SMP was chosen.

## Burkina Faso - BV 1965

The first electoral provisions of independent Burkina Faso (Upper Volta until 1984) were adopted in 1965, providing for national elections under BV. Pre-independence elections had been held in 1959 under a mixed system (Grotz 1999: 123-129). Burkina Faso scores 0 in the

Polyarchy dataset between 1960 and 1977. The country was not a democracy when BV was introduced.

## Laos - SMP-BV 1965

Laos replaced TBM with SMP-BV in 1965 (Hartmann 2001d: 132-133). Laos has never been a democracy.

## Singapore - SMP 1965

Singapore became independent in 1965, and three years later the first national elections in independent Singapore were held. Elections had also been held during the colonial era. These elections were characterized by a restricted franchise. As a result of the 1963 elections, Singapore scores 8.22 in the Polyarchy dataset. However, the country has never been regarded a real democracy (Rieger 2001: 239-249). Consequently, I regard Singapore as non-democratic when SMP was chosen.

## Barbados - SMP 1966

The Constitution of independent Barbados, providing for parliamentary elections under SMP, was adopted in 1966, four weeks after general elections had been held under the cumulative vote formula. Competitive elections had been conducted since 1951. As a consequence of the 1966 elections, Barbados scores 13.18 in the Polyarchy dataset. The pre-independence elections had also met democratic standards (Hillebrandt 1993c: 85-99). Accordingly, Barbados was a democracy when SMP was introduced.

## Botswana - SMP 1966

Botswana attained independence in 1966, one year after the first and only pre-independence elections were conducted under SMP (Baumhögger 1999: 103-109). Despite being recognized as one of only a few stable democracies in Africa, Botswana was not democratic when the decision on the electoral system was taken.

## Guyana - List PR 1966

Guyana received independence in 1966. Pre-independence elections had been held since the 1950s. SMP was replaced with list PR in 1966. As a result of the 1964 elections, Guyana scores 20.16 in the Polyarchy dataset 1966-1967. According to the general description of the politics in colonial British Guyana, democracy also prevailed before 1964 (Hillebrandt 1993e: 389-394). Consequently, I regard the choice of list PR as democratic.

## Hungary - TBM 1966

Hungary replaced list PR with TBM in 1966 (Birch et al 2002: 49). The country scores 1.03 in the Polyarchy dataset in 1966, and remained non-democratic until the 1990s.

## Lesotho - SMP 1966

Lesotho became independent in 1966, one year after pre-independence elections were conducted under SMP (Engel 1999: 495-499). As a result of the 1965 elections, Lesotho scores 18.54 in the Polyarchy dataset between 1966 and 1969. However, the decision on the electoral system was taken in non-democratic circumstances.

## Paraguay - Mixed-fusion 1967

Paraguay replaced list PR with a mixed system in 1967 (León-Roesch 1993: 635-637). As a consequence of the previous elections in 1963, Paraguay scores 4.18 in the Polyarchy dataset between 1963 and 1967. Paraguay was not a democracy in the 1960s.

## Congo (-Kinshasa) - BV 1967

Congo (-Kinshasa) adopted an electoral law in 1967 that provided for national elections under BV. Elections were held in 1970 (Schmidt and Stroux 1999: 284-286). The country has never been a democracy.

## Equatorial Guinea - SMP 1968

The second elections in Equatorial Guinea were held in 1968, a few weeks before independence was achieved from Spain. SMP was applied in accordance with the 1968 Constitution. As a result of the 1968 elections, the country scores 12.00 in the Polyarchy dataset 1968-1969. However, the decision on the electoral system of independent Equatorial Guinea was taken in non-democratic circumstances.

## Maldives - SNTV 1968

The Maldives became independent in 1965. The 1968 Constitution provided for parliamentary elections under SNTV (Lehr 2001: 585-591). The small island state is not noted in the Polyarchy dataset. However, the country has never experienced democracy.

## Mauritius - BV 1968

Mauritius proclaimed independence in 1968, one year after pre-independence parliamentary elections had been held under BV (Krennerich 1999a: 603-609). Although the elections were democratic - Mauritius scores 15.83 in the Polyarchy dataset between 1968 and 1975 - the decision on the electoral system was taken in non-democratic circumstances.

## Nauru - AV 1968

The Electoral Act 1965 provided for parliamentary elections under AV. The first preindependence elections were conducted in 1951. Nauru is not noted in the Polyarchy dataset. Democratic standards had been met already before independence (Reilly and Gratschew 2001: 697-701). Accordingly, Nauru was non-democratic when AV was chosen.

## Swaziland - BV 1968

Swaziland became independent in 1968, one year after pre-independence elections under BV had been held (Basedau 1999c: 863-866). Swaziland scores 0 in the Polyarchy dataset every single year.

## Burkina Faso - List PR 1970

The electoral law for the 1970 parliamentary elections provided for a proportional list system. BV had been applied in the previous elections (Grotz 1999: 123-129). Burkina Faso scores 0 in the Polyarchy dataset between 1960 and 1977.

## Morocco - SMP 1970

The 1970 Constitution in Morocco provided for parliamentary elections under SMP. However, only 90 of 240 members were directly elected (Pereira and Fernández 1999: 623-630). Morocco scores 0 in the Polyarchy dataset between 1966 and 1969.

## Fiji - SMB-BV 1970

Fiji became independent in 1970. The decision on the electoral system was taken at the Constitutional Conference the same year. A mixed plurality system with constituencies at several levels was introduced. Elections had also been held during the colonial era. The first elections under universal suffrage were conducted in 1963 (Hartmann 2001c: 643-653). Fiji is noted in the Polyarchy dataset since 1966, its ID value being 12.09 between 1966 and 1971. I consider Fiji a democracy when the decision on the electoral system was taken in 1970.

## Pakistan - SMP 1970

The first direct parliamentary elections in Pakistan were held in 1970 (Zingel 2001: 661-673). Pakistan scores 0.04 in the Polyarchy dataset from 1965 to 1969. Consequently, Pakistan was not a democracy when the electoral system for direct elections was chosen.

## North Yemen - SMP 1971

The 1970 Constitution provided for the establishment of a parliamentary system and general elections in the Yemen Arab Republic (North Yemen). Elections were held in 1971 (Glosemeyer 2001: 293-301). The country scores 0 in the Polyarchy dataset during its whole existence.

## Bangladesh - SMP 1972

The 1972 Constitution provided for a parliamentary system and elections under SMP (Ahmed 2001: 515-525). Bangladesh scores 0 in 1971, and 5.68 in 1972 in the Polyarchy dataset. As a consequence of the 1973 elections, its ID value is 6.7. However, I regard Bangladesh as nondemocratic when SMP was adopted.

## Panama - SMP 1972

Panama replaced list PR with SMP in 1972 (Bendel and Krennerich 1993b: 605-630). Panama scores 0 in the Polyarchy dataset between 1969 and 1983.

## Syria - BV 1973

Syria introduced an electoral law in 1973 that provided for national elections under BV (Zisser 2001: 213-221). Syria has never been a democracy.

## South Korea - BV 1973

South Korea replaced the mixed system with BV in 1973 (Croissant 2001: 411-420). The country scores 0 in the Polyarchy dataset from 1972 to 1979 after having been fairly democratic between 1963 and 1971. Accordingly, South Korea was not democratic when BV was chosen.

## Bahrain - SNTV 1973

Bahrain gained independence in 1971. The 1973 Constitution provided for national elections under SNTV (Hartmann 2001a: 49-53). Bahrain scores 0 in the Polyarchy dataset every single year.

## Bahamas - SMP 1973

The 1964 Constitution provided for legislative elections under SMP. The same system was retained in the 1974 Constitution of independent Bahamas. Direct elections had been held at least since 1962 (Hillebrandt 1993b: 77-84). The country scores 12.51 in the Polyarchy dataset from 1973 to 1976. I regard Bahamas as a democracy when SMP was adopted.

## Grenada - SMP 1974

Grenada became independent in 1974. Elections had been held at least since 1951. The Constitution of 1974 provided for parliamentary elections under SMP, the same system that had been used since 1951 (Hillebrandt 1993d: 349-357). As a result of the 1972 elections, Grenada scores 13.97 in the Polyarchy dataset 1974-1975. I regard Grenada as democratic when SMP was adopted in 1974.

## Burma - OBM 1974

The 1974 Constitution in Burma provided for an absolute majority system with single-member constituencies. No second round of voting was recognized (Frasch 2001: 600-601). Burma (Myanmar) has never been a democracy.

## APPENDIX II

Country (year of electoral system choice in brackets), democratic status, electoral system, ethnic diversity, cultural diversity, and population

| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Albania (1992) | no | Mixed-corrective | low | medium-sized | 3273000 |
| Albania (1996) | no | Mixed-superposition | low | medium-sized | 3350000 |
| Algeria (1962) | no | Block vote | low | low | 10800000 |
| Algeria (1991) | no | Two-ballot majority | low | low | 25022000 |
| Algeria (1997) | no | List PR | low | low | 29000000 |
| Andorra (1993) | no | Mixed-superposition | high | high | 53000 |
| Angola (1992) | no | List PR | high | high | 8430000 |
| Antigua \& B. (1981) | yes | Single-member plurality | low | medium-sized | 69000 |
| Argentina (1957) | no | List PR | low | low | 19000000 |
| Armenia (1995) | no | Mixed-superposition | low | low | 3685000 |
| Azerbaijan (1995) | no | Mixed-superposition | low | low | 7455000 |
| Bahamas (1974) | yes | Single-member plurality | low | medium-sized | 170000 |
| Bahrain (1973) | no | SNTV | low | low | 210000 |
| Bahrain (2002) | no | Two-ballot majority | medium-sized | medium-sized | 660000 |
| Bangladesh (1972) | no | Single-member plurality | low | low | 67403000 |
| Barbados (1966) | yes | Single-member plurality | low | medium-sized | 234000 |
| Belarus (1991) | no | Two-ballot majority | medium-sized | medium-sized | 10260000 |
| Belau (1994) | yes | SMP-BV | medium-sized | high | 17000 |
| Belize (1981) | yes | Single-member plurality | medium-sized | medium-sized | 146000 |
| Benin (1960) | no | Block vote | high | high | 2055000 |
| Benin (1964) | no | List PR | high | high | 2300000 |
| Bolivia (1956) | no | List PR | medium-sized | medium-sized | 3100000 |
| Bolivia (1997) | yes | Mixed-corrective | high | high | 7700000 |
| Bosnia-Herz. (1996) | no | List PR | high | high | 3900000 |
| Botswana (1966) | no | Single-member plurality | low | high | 542000 |
| Brazil (1945) | no | List PR | medium-sized | medium-sized | 47484000 |
| Bulgaria (1953) | no | List PR | low | low | 7251000 |
| Bulgaria (1956) | no | Two-ballot majority | low | low | 7600000 |
| Bulgaria (1990) | no | Mixed-superposition | low | low | 8718000 |
| Bulgaria (1991) | yes | List PR | low | low | 8718000 |
| Burkina Faso (1965) | no | Block vote | high | high | 5266000 |
| Burkina Faso (1970) | no | List PR | high | high | 5626000 |
| Burma (1948) | no | SMP-BV | medium-sized | medium-sized | 19000000 |
| Burma (1974) | no | One-ballot majority | medium-sized | medium-sized | 30600000 |
| Burma (1989) | no | Single-member plurality | medium-sized | medium-sized | 41068000 |
| Burundi (1965) | no | Single-member plurality | low | high | 3162000 |
| Burundi (1993) | no | List PR | low | medium-sized | 5285000 |
| Cambodia (1953) | no | Single-member plurality | low | low | 4346000 |
| Cambodia (1992) | no | List PR | low | low | 8695000 |
| Cameroon (1960) | no | SMP-BV | high | high | 5609000 |
| Cameroon (1992) | no | Super-mixed | high | high | 11894000 |
| Cape Verde (1975) | no | Block vote | bipolar | bipolar | 282000 |
| Cape Verde (1992) | no | List PR | bipolar | bipolar | 349000 |
| Central A. R. (1960) | no | Block vote | high | high | 1467000 |


| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Central A. R. (1998) | no | Two-ballot majority | high | high | 3516000 |
| Chad (1960) | no | Block vote | high | high | 3042000 |
| Chad (1996) | no | Super-mixed | high | high | 6850000 |
| Comoros (1978) | no | Two-ballot majority | low | low | 334000 |
| Congo (-Br.) (1960) | no | Block vote | high | high | 931000 |
| Congo (-Br.) (1992) | no | Two-ballot majority | high | high | 2206000 |
| Congo (-Kin.) (1960) | no | List PR | high | high | 16462000 |
| Congo (-Kin.) (1967) | no | Block vote | high | high | 21395000 |
| Congo (-Kin.) (1977) | no | SNTV | high | high | 28129000 |
| Congo (-Kin.) (1982) | no | Block vote | high | high | 28129000 |
| Cote d'Ivoire (1960) | no | Block vote | high | high | 3565000 |
| Cote d'Ivoire (1980) | no | Two-ballot majority | high | high | 8261000 |
| Cote d'Ivoire (1985) | no | Block vote | high | high | 10100000 |
| Croatia (1991) | no | Mixed-superposition | low | low | 4754000 |
| Croatia (1999) | no | List PR | low | low | 4681000 |
| Cuba (1992) | no | One-ballot majority | medium-sized | high | 10628000 |
| Cyprus (1960) | yes | Block vote | bipolar | bipolar | 573000 |
| Cyprus (1981) | yes | List PR | medium-sized | high | 631000 |
| Czechoslov. (1990) | no | List PR | bipolar | high | 15596000 |
| Czech Rep.(1993) | yes | List PR | low | high | 10298000 |
| Djibouti (1977) | no | Block vote | medium-sized | medium-sized | 281000 |
| Dominica (1978) | yes | Single-member plurality | high | high | 75000 |
| Dominican R. (1962) | no | List PR | bipolar | bipolar | 3231000 |
| East Timor (2002) | no | List PR | no info | no info | 998000 |
| Ecuador (1946) | no | List PR | medium-sized | medium-sized | 2926000 |
| Ecuador (1978) | no | Super-mixed | high | high | 8123000 |
| Egypt (1950) | no | Two-ballot majority | low | low | 20461000 |
| Egypt (1983) | no | List PR | low | low | 40546000 |
| Egypt (1986) | no | Mixed-superposition | low | low | 47000000 |
| Egypt (1990) | no | Two-ballot majority | low | low | 53051000 |
| El Salvador (1963) | no | List PR | low | low | 2574000 |
| Equatorial G. (1968) | no | Single-member plurality | medium-sized | medium-sized | 270000 |
| Equatorial G. (1993) | no | List PR | medium-sized | medium-sized | 369000 |
| Estonia (1992) | yes | List PR | bipolar | high | 1571000 |
| Ethiopia (1955) | no | Block vote | high | high | 22000000 |
| Fiji (1970) | yes | Block vote | bipolar | bipolar | 520000 |
| Fiji (1999) | no | Alternative vote | bipolar | high | 811000 |
| France (1945) | yes | List PR | low | low | 41518000 |
| France (1951) | yes | Mixed-conditional | low | low | 41736000 |
| France (1958) | yes | Two-ballot majority | low | low | 45684000 |
| France (1986) | yes | List PR | low | medium-sized | 55400000 |
| France (1988) | yes | Two-ballot majority | low | medium-sized | 56735000 |
| Gabon (1960) | yes | Block vote | high | high | 446000 |
| Gabon (1990) | no | Two-ballot majority | high | high | 1078000 |
| Gambia (1965) | no | Single-member plurality | high | high | 445000 |
| Georgia (1992) | no | Mixed-superposition | medium-sized | medium-sized | 5460000 |
| Germany (E) (1949) | no | Block vote | low | bipolar | 17000000 |
| Germany (E) (1990) | no | List PR | low | bipolar | 15886000 |
| Germany (W) (1949) | no | Mixed-corrective | low | bipolar | 50000000 |
| Ghana (1957) | no | Single-member plurality | high | high | 6958000 |


| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Greece (1952) | yes | Single-member plurality | low | low | 7566000 |
| Greece (1956) | yes | Mixed-coexistence | low | low | 8000000 |
| Greece (1958) | yes | List PR | low | low | 8327000 |
| Grenada (1974) | yes | Single-member plurality | bipolar | bipolar | 92000 |
| Guatemala (1946) | no | Mixed-coexistence | bipolar | medium-sized | 2650000 |
| Guatemala (1956) | no | List PR | bipolar | medium-sized | 3500000 |
| Guinea (1963) | no | Block vote | high | high | 3019000 |
| Guinea (1990) | no | Mixed-superposition | high | high | 5939000 |
| Guinea-Bis. (1976) | no | Block vote | high | high | 705000 |
| Guinea-Bis. (1994) | no | List PR | high | high | 1130000 |
| Guyana (1966) | yes | List PR | medium-sized | high | 590000 |
| Haiti (1995) | no | Two-ballot majority | low | low | 6570000 |
| Honduras (1957) | no | List PR | low | low | 1873000 |
| Hungary (1966) | no | Two-ballot majority | low | medium-sized | 10170000 |
| Hungary (1989) | no | Super-mixed | low | medium-sized | 10365000 |
| Iceland (1959) | yes | List PR | low | low | 176000 |
| India (1950) | no | SMP-BV | high | high | 369880000 |
| Indonesia (1953) | no | List PR | high | high | 75449000 |
| Iran (1963) | no | SMP-BV | bipolar | high | 21554000 |
| Iran (1979) | no | Two-ballot majority | medium-sized | medium-sized | 39000000 |
| Iraq (1952) | no | Two-ballot majority | medium-sized | medium-sized | 16913000 |
| Iraq (1995) | no | Block vote | medium-sized | medium-sized | 20643000 |
| Israel (1948) | yes | List PR | low | medium-sized | 1500000 |
| Italy (1953) | yes | Mixed-conditional | low | low | 47104000 |
| Italy (1954) | yes | List PR | low | low | 48500000 |
| Italy (1993) | yes | Mixed-corrective | low | low | 56749000 |
| Jamaica (1962) | yes | Single-member plurality | bipolar | high | 1629000 |
| Japan (1946) | no | SNTV | low | low | 78150000 |
| Japan (1993) | yes | Mixed-superposition | low | low | 125200000 |
| Jordan (1947) | no | SMP-BV | bipolar | bipolar | 1000000 |
| Jordan (1993) | no | SNTV | low | low | 3306000 |
| Kazakhstan (1993) | no | Single-member plurality | bipolar | bipolar | 16742000 |
| Kazakhstan (1995) | no | Two-ballot majority | medium-sized | medium-sized | 16255000 |
| Kazakhstan (1999) | no | Mixed-superposition | medium-sized | medium-sized | 15768000 |
| Kenya (1963) | no | Single-member plurality | high | high | 8157000 |
| Kiribati (1978) | yes | Two-ballot majority | low | bipolar | 58000 |
| Korea ( N ) (1948) | no | One-ballot majority | low | medium-sized | 9471000 |
| Korea (S) (1948) | no | Single-member plurality | low | high | 21147000 |
| Korea (S) (1963) | no | Mixed-superposition | low | high | 25142000 |
| Korea (S) (1973) | no | Block vote | low | high | 32976000 |
| Korea (S) (1980) | no | Mixed-superposition | low | high | 38124000 |
| Kuwait (1962) | no | Block vote | low | high | 292000 |
| Kyrgyzstan (1994) | no | Two-ballot majority | bipolar | bipolar | 4600000 |
| Kyrgyzstan (1999) | no | Mixed-superposition | bipolar | bipolar | 4797000 |
| Laos (1953) | no | SMP-BV | high | high | 1886000 |
| Laos (1960) | no | Two-ballot majority | high | high | 2309000 |
| Laos (1965) | no | SMP-BV | high | high | 2577000 |
| Latvia (1993) | yes | List PR | medium-sized | high | 2671000 |
| Lebanon (1953) | yes | Block vote | low | high | 1364000 |
| Lesotho (1966) | no | Single-member plurality | low | high | 967000 |


| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lesotho (2002) | no | Mixed-superposition | low | high | 2167000 |
| Liberia (1985) | no | Two-ballot majority | high | high | 2083000 |
| Liberia (1997) | no | List PR | high | high | 2800000 |
| Libya (1951) | no | Single-member plurality | low | low | 961000 |
| Lithuania (1992) | yes | Mixed-superposition | low | medium-sized | 3722000 |
| Macedonia (1994) | no | Two-ballot majority | medium-sized | medium-sized | 1950000 |
| Macedonia (1998) | no | Mixed-superposition | medium-sized | medium-sized | 2064000 |
| Macedonia (2002) | no | List PR | medium-sized | medium-sized | 2064000 |
| Madagascar (1960) | no | Super-mixed | high | high | 5482000 |
| Madagascar (1977) | no | Block vote | high | high | 6766000 |
| Madagascar (1983) | no | Mixed-coexistence | high | high | 8678000 |
| Madagascar (1993) | no | List PR | high | high | 11525000 |
| Madagascar (1998) | yes | Mixed-coexistence | high | high | 15295000 |
| Malawi (1964) | no | Single-member plurality | high | high | 3900000 |
| Malaysia (1958) | yes | Single-member plurality | high | high | 7908000 |
| Maldives (1968) | no | SNTV | high | high | 117000 |
| Mali (1960) | no | Block vote | high | high | 4486000 |
| Mali (1992) | no | Two-ballot majority | high | high | 8231000 |
| Malta (1964) | yes | STV | low | low | 328000 |
| Marshall Isl. (1991) | yes | Single-member plurality | low | medium-sized | 47000 |
| Mauritania (1960) | no | Single-member plurality | low | medium-sized | 1057000 |
| Mauritania (1992) | no | Two-ballot majority | low | medium-sized | 1979000 |
| Mauritius (1968) | no | Block vote | medium-sized | high | 829000 |
| Mexico (1963) | no | Mixed-corrective | medium-sized | medium-sized | 36945000 |
| Micronesia (1991) | yes | Single-member plurality | high | high | 101000 |
| Moldova (1993) | no | List PR | medium-sized | medium-sized | 4364000 |
| Monaco (1958) | no | Two-ballot majority | medium-sized | medium-sized | 21000 |
| Monaco (2002) | yes | Super-mixed | high | high | 32000 |
| Mongolia (1949) | no | Two-ballot majority | medium-sized | low | 747000 |
| Mongolia (1992) | no | Block vote | medium-sized | low | 2122000 |
| Morocco (1962) | no | List PR | bipolar | bipolar | 11640000 |
| Morocco (1970) | no | Single-member plurality | bipolar | bipolar | 15126000 |
| Morocco (1997) | no | List PR | bipolar | bipolar | 27000000 |
| Mozambique (1994) | no | List PR | high | high | 16800000 |
| Namibia (1990) | no | List PR | high | high | 1409000 |
| Nauru (1968) | yes | Alternative vote | bipolar | bipolar | 7000 |
| Nepal (1959) | no | Single-member plurality | bipolar | bipolar | 9180000 |
| New Zealand (1996) | yes | Mixed-corrective | medium-sized | medium-sized | 3630000 |
| Nicaragua (1962) | no | Mixed-fusion | bipolar | bipolar | 1493000 |
| Nicaragua (1984) | no | List PR | medium-sized | medium-sized | 3200000 |
| Niger (1960) | no | Block vote | medium-sized | medium-sized | 3168000 |
| Niger (1993) | no | List PR | high | high | 7644000 |
| Nigeria (1960) | no | Single-member plurality | high | high | 39230000 |
| Pakistan (1970) | no | Single-member plurality | medium-sized | medium-sized | 65706000 |
| Panama (1972) | no | Single-member plurality | medium-sized | medium-sized | 1531000 |
| Panama (1980) | no | Mixed-coexistence | medium-sized | medium-sized | 1950000 |
| Papua N. G. (1975) | yes | Single-member plurality | high | high | 2640000 |
| Papua N. G. (2002) | yes | Alternative vote | high | high | 5000000 |
| Paraguay (1947) | no | List PR | medium-sized | medium-sized | 1300000 |
| Paraguay (1967) | no | Mixed-fusion | medium-sized | medium-sized | 2351000 |


| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Paraguay (1990) | no | List PR | low | medium-sized | 4219000 |
| Philippines (1946) | yes | Block vote | high | high | 19000000 |
| Philippines (1998) | yes | Mixed-superposition | high | high | 76320000 |
| Philippines (2001) | yes | Single-member plurality | high | high | 76320000 |
| Poland (1991) | no | List PR | low | low | 38057000 |
| Portugal (1975) | no | List PR | low | low | 9400000 |
| Romania (1990) | no | List PR | low | low | 23207000 |
| Russia (1993) | no | Mixed-superposition | low | high | 148292000 |
| Rwanda (1962) | no | List PR | low | high | 3083000 |
| Rwanda (1978) | no | Block vote | low | high | 5178000 |
| Rwanda (2003) | no | List PR | low | high | 7810000 |
| St Kitts \& N. (1983) | yes | Single-member plurality | low | medium-sized | 44000 |
| St Lucia (1979) | yes | Single-member plurality | low | low | 122000 |
| St Vinc. \& Gr. (1979) | yes | Single-member plurality | medium-sized | medium-sized | 99000 |
| Samoa (W.) (1963) | no | SMP-BV | low | medium-sized | 127000 |
| San Marino (1951) | no | List PR | low | low | 13000 |
| Sao T. \& Pr. (1991) | no | List PR | high | high | 117000 |
| Senegal (1963) | no | Block vote | high | high | 3270000 |
| Senegal (1978) | no | List PR | high | high | 5640000 |
| Senegal (1983) | no | Mixed-superposition | high | high | 5640000 |
| Seychelles (1976) | yes | Mixed-superposition | low | low | 59000 |
| Seychelles (1979) | no | Single-member plurality | low | low | 63000 |
| Seychelles (1993) | no | Mixed-superposition | low | low | 70000 |
| Sierra Leone (1961) | no | Single-member plurality | high | high | 2241000 |
| Sierra Leone (1996) | no | List PR | high | high | 445000 |
| Singapore (1965) | no | Single-member plurality | bipolar | high | 1852000 |
| Slovakia (1993) | yes | List PR | low | medium-sized | 5298000 |
| Slovenia (1991) | no | List PR | low | medium-sized | 1998000 |
| Solomon Isl. (1978) | yes | Single-member plurality | low | high | 23000 |
| Somalia (1964) | no | List PR | bipolar | bipolar | 3300000 |
| Somalia (1979) | no | Block vote | bipolar | bipolar | 3270000 |
| South Africa (1993) | no | List PR | medium-sized | high | 40600000 |
| Spain (1977) | no | List PR | medium-sized | medium-sized | 37636000 |
| Sri Lanka (1948) | yes | Single-member plurality | bipolar | medium-sized | 7000000 |
| Sri Lanka (1978) | yes | List PR | high | high | 14747000 |
| Sudan (1956) | no | Single-member plurality | high | high | 9500000 |
| Suriname (1975) | yes | Mixed-coexistence | high | high | 364000 |
| Suriname (1987) | no | List PR | high | high | 380000 |
| Swaziland (1968) | no | Block vote | low | high | 455000 |
| Syria (1947) | no | Two-ballot majority | low | medium-sized | 3495000 |
| Syria (1973) | no | Block vote | low | medium-sized | 6305000 |
| Taiwan (1946) | no | SNTV | low | high | 7000000 |
| Taiwan (1991) | no | Mixed-superposition | low | high | 20279000 |
| Tajikistan (1994) | no | Two-ballot majority | bipolar | bipolar | 5800000 |
| Tajikistan (1999) | no | Mixed-superposition | bipolar | bipolar | 6303000 |
| Tanzania (1964) | no | Single-member plurality | high | high | 12300000 |
| Thailand (1997) | yes | Mixed-superposition | medium-sized | medium-sized | 60000000 |
| Togo (1960) | no | Single-member plurality | high | high | 1456000 |
| Togo (1992) | no | Two-ballot majority | high | high | 3680000 |
| Trinidad \& T. (1962) | yes | Single-member plurality | high | high | 828000 |


| Country | Democracy | Electoral system | Ethnic diversity | Cultural diversity | Population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tunisia (1959) | no | Block vote | low | low | 4149000 |
| Tunisia (1997) | no | Mixed-corrective | low | low | 8207000 |
| Turkey (1946) | no | Block vote | low | low | 19400000 |
| Turkey (1961) | yes | List PR | low | low | 27509000 |
| Turkmenistan (1994) | no | Two-ballot majority | medium-sized | medium-sized | 4250000 |
| Tuvalu (1978) | yes | Single-member plurality | low | low | 8000 |
| Uganda (1980) | no | Single-member plurality | high | high | 12298000 |
| Ukraine (1993) | no | Two-ballot majority | bipolar | medium-sized | 51892000 |
| Ukraine (1997) | no | Mixed-superposition | bipolar | medium-sized | 50500000 |
| Uzbekistan (1992) | no | Two-ballot majority | low | medium-sized | 20515000 |
| Vanuatu (1980) | yes | SNTV | low | high | 115000 |
| Venezuela (1946) | no | List PR | bipolar | bipolar | 4500000 |
| Venezuela (1993) | yes | Mixed-corrective | medium-sized | medium-sized | 19502000 |
| Vietnam (1946) | no | Block vote | low | medium-sized | 25587000 |
| Vietnam (1976) | no | Two-ballot majority | low | medium-sized | 49000000 |
| Vietnam (S) (1956) | no | Single-member plurality | low | medium-sized | no info |
| Yemen (1993) | no | Single-member plurality | low | low | 12023000 |
| Yemen (N) (1971) | no | Single-member plurality | low | low | 5770000 |
| Yemen (S) (1978) | no | Block vote | low | low | 1750000 |
| Yugoslavia (1993) | no | Mixed-superposition | medium-sized | medium-sized | 10529000 |
| Yugoslavia (1993) | no | List PR | medium-sized | medium-sized | 10529000 |
| Zambia (1964) | no | Single-member plurality | high | high | 3700000 |
| Zimbabwe (1980) | no | Mixed-coexistence | bipolar | high | 7298000 |
| Zimbabwe (1985) | no | Single-member plurality | bipolar | high | 8630000 |

## APPENDIX III

Country (year of electoral system choice in brackets), colonial legacy, regional diffusion, form of government, territorial organization, and chamber structure

| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Albania (1992) | no | no | non-democratic | unitary | unicameral |
| Albania (1996) | no | yes | non-democratic | unitary | unicameral |
| Algeria (1962) | France | no | non-democratic | unitary | unicameral |
| Algeria (1991) | no | no | non-democratic | unitary | unicameral |
| Algeria (1997) | no | no | non-democratic | unitary | bicameral |
| Andorra (1993) | no | no | non-democratic | unitary | unicameral |
| Angola (1992) | no | yes | non-democratic | unitary | unicameral |
| Antigua \& B. (1981) | UK | no | parliamentary | unitary | bicameral |
| Argentina (1957) | no | yes | non-democratic | unitary | bicameral |
| Armenia (1995) | no | yes | non-democratic | unitary | unicameral |
| Azerbaijan (1995) | no | yes | non-democratic | unitary | unicameral |
| Bahamas (1974) | UK | no | parliamentary | unitary | bicameral |
| Bahrain (1973) | no | yes | non-democratic | unitary | unicameral |
| Bahrain (2002) | no | yes | non-democratic | unitary | bicameral |
| Bangladesh (1972) | no | yes | non-democratic | unitary | unicameral |
| Barbados (1966) | UK | no | parliamentary | unitary | bicameral |
| Belarus (1991) | Soviet Union | no | non-democratic | unitary | bicameral |
| Belau (1994) | US | no | presidential | federal | bicameral |
| Belize (1981) | UK | no | parliamentary | unitary | bicameral |
| Benin (1960) | France | no | non-democratic | unitary | unicameral |
| Benin (1964) | no | no | non-democratic | unitary | unicameral |
| Bolivia (1956) | no | yes | non-democratic | unitary | bicameral |
| Bolivia (1997) | no | yes | presidential | unitary | bicameral |
| Bosnia-Herz. (1996) | Yugoslavia | no | non-democratic | federal | bicameral |
| Botswana (1966) | UK | no | non-democratic | unitary | unicameral |
| Brazil (1945) | no | no | non-democratic | federal | bicameral |
| Bulgaria (1953) | no | yes | non-democratic | unitary | no info |
| Bulgaria (1956) | no | yes | non-democratic | unitary | no info |
| Bulgaria (1990) | no | yes | non-democratic | unitary | unicameral |
| Bulgaria (1991) | no | yes | parliamentary | unitary | unicameral |
| Burkina Faso (1965) | France | no | non-democratic | unitary | unicameral |
| Burkina Faso (1970) | no | no | non-democratic | unitary | unicameral |
| Burma (1948) | UK | no | non-democratic | unitary | unicameral |
| Burma (1974) | no | no | non-democratic | unitary | unicameral |
| Burma (1989) | no | yes | non-democratic | unitary | unicameral |
| Burundi (1965) | no | yes | non-democratic | unitary | unicameral |
| Burundi (1993) | no | no | non-democratic | unitary | unicameral |
| Cambodia (1953) | France | no | non-democratic | unitary | bicameral |
| Cambodia (1992) | no | yes | non-democratic | unitary | unicameral |
| Cameroon (1960) | France | no | non-democratic | unitary | unicameral |
| Cameroon (1992) | no | no | non-democratic | unitary | unicameral |
| Cape Verde (1975) | no | yes | non-democratic | unitary | unicameral |
| Cape Verde (1992) | no | no | non-democratic | unitary | unicameral |
| Central A. R. (1960) | France | no | non-democratic | unitary | unicameral |


| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Central A. R. (1998) | no | no | non-democratic | unitary | unicameral |
| Chad (1960) | France | no | non-democratic | unitary | unicameral |
| Chad (1996) | no | yes | non-democratic | unitary | bicameral |
| Comoros (1978) | France | no | non-democratic | federal | unicameral |
| Congo (-Br.) (1960) | France | no | non-democratic | unitary | unicameral |
| Congo (-Br.) (1992) | no | yes | non-democratic | unitary | unicameral |
| Congo (-Kin.) (1960) | Belgium | no | non-democratic | federal | bicameral |
| Congo (-Kin.) (1967) | no | yes | non-democratic | unitary | unicameral |
| Congo (-Kin.) (1977) | no | no | non-democratic | unitary | unicameral |
| Congo (-Kin.) (1982) | no | yes | non-democratic | unitary | nicameral |
| Cote d'lvoire (1960) | France | no | non-democratic | unitary | unicameral |
| Cote d'Ivoire (1980) | no | no | non-democratic | unitary | nicameral |
| Cote d'lvoire (1985) | no | yes | non-democratic | unitary | nicameral |
| Croatia (1991) | no | yes | non-democratic | unitary | bicameral |
| Croatia (1999) | no | yes | non-democratic | unitary | nicameral |
| Cuba (1992) | no | no | non-democratic | unitary | unicameral |
| Cyprus (1960) | UK | no | presidential | unitary | nicameral |
| Cyprus (1981) | no | yes | presidential | unitary | nicameral |
| Czechoslov. (1990) | no | yes | non-democratic | federal | meral |
| Czech Rep. (1993) | no | yes | parliamentary | unitary | bicameral |
| Djibouti (1977) | France | no | non-democratic | unitary | unicameral |
| Dominica (1978) | UK | no | parliamentary | unitary | unicameral |
| Dominican R. (1962) | no | no | non-democratic | unitary | unicameral |
| East Timor (2002) | Indonesia | no | non-democratic | unitary | nicameral |
| Ecuador (1946) | no | yes | non-democratic | unitary | icamer |
| Ecuador (1978) | no | no | non-democratic | unitary | unicameral |
| Egypt (1950) | no | no | non-democratic | unitary | unicameral |
| Egypt (1983) | no | no | non-democratic | unitary | bicameral |
| Egypt (1986) | no | no | non-democratic | unitary | bicameral |
| Egypt (1990) | no | no | non-democratic | unitary | bicameral |
| El Salvador (1963) | no | yes | non-democratic | unitary | bicameral |
| Equatorial G. (1968) | no | yes | non-democratic | federal | unicameral |
| Equatorial G. (1993) | no | no | non-democratic | unitary | unicameral |
| Estonia (1992) | no | yes | hybrid | unitary | unicameral |
| Ethiopia (1955) | no | no | non-democratic | unitary | bicameral |
| Fiji (1970) | UK | no | parliamentary | unitary | bicameral |
| Fiji (1999) | no | yes | non-democratic | unitary | bicameral |
| France (1945) | no | no | parliamentary | unitary | bicameral |
| France (1951) | no | no | parliamentary | unitary | bicameral |
| France (1958) | no | no | semi-presidential | unitary | bicameral |
| France (1986) | no | no | semi-presidential | unitary | bicameral |
| France (1988) | no | no | semi-presidential | unitary | bicameral |
| Gabon (1960) | France | no | presidential | unitary | unicameral |
| Gabon (1990) | no | no | non-democratic | unitary | unicameral |
| Gambia (1965) | UK | no | non-democratic | unitary | unicameral |
| Georgia (1992) | no | no | non-democratic | unitary | unicameral |
| Germany (E) (1949) | no | no | non-democratic | unitary | no info |
| Germany (E) (1990) | no | yes | non-democratic | unitary | icameral |
| Germany (W) (1949) | no | no | non-democratic | federal | bicameral |
| Ghana (1957) | UK | no | non-democratic | unitary | unicameral |


| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Greece (1952) | no | no | parliamentary | unitary | unicameral |
| Greece (1956) | no | no | parliamentary | unitary | unicameral |
| Greece (1958) | no | yes | parliamentary | unitary | unicameral |
| Grenada (1974) | UK | no | parliamentary | unitary | bicameral |
| Guatemala (1946) | no | no | non-democratic | unitary | unicameral |
| Guatemala (1956) | no | yes | non-democratic | unitary | unicameral |
| Guinea (1963) | France | no | non-democratic | unitary | unicameral |
| Guinea (1990) | no | yes | non-democratic | unitary | unicameral |
| Guinea-Bis. (1976) | no | yes | non-democratic | unitary | unicameral |
| Guinea-Bis. (1994) | no | yes | non-democratic | unitary | unicameral |
| Guyana (1966) | no | yes | semi-presidential | unitary | unicameral |
| Haiti (1995) | no | no | non-democratic | unitary | bicameral |
| Honduras (1957) | no | yes | non-democratic | unitary | unicameral |
| Hungary (1966) | no | yes | non-democratic | unitary | unicameral |
| Hungary (1989) | no | no | non-democratic | unitary | unicameral |
| Iceland (1959) | no | yes | semi-presidential | unitary | unicameral |
| India (1950) | UK | no | non-democratic | unitary | unicameral |
| Indonesia (1953) | Netherlands | no | non-democratic | unitary | unicameral |
| Iran (1963) | no | no | non-democratic | unitary | bicameral |
| Iran (1979) | no | no | non-democratic | unitary | unicameral |
| Iraq (1952) | no | no | non-democratic | unitary | unicameral |
| Iraq (1995) | no | no | non-democratic | unitary | unicameral |
| Israel (1948) | no | no | parliamentary | unitary | unicameral |
| Italy (1953) | no | yes | parliamentary | unitary | bicameral |
| Italy (1954) | no | no | parliamentary | unitary | bicameral |
| Italy (1993) | no | no | parliamentary | unitary | bicameral |
| Jamaica (1962) | UK | no | parliamentary | unitary | bicameral |
| Japan (1946) | no | no | non-democratic | unitary | bicameral |
| Japan (1993) | no | no | parliamentary | unitary | bicameral |
| Jordan (1947) | UK | no | non-democratic | unitary | bicameral |
| Jordan (1993) | no | no | non-democratic | unitary | bicameral |
| Kazakhstan (1993) | no | no | non-democratic | unitary | unicameral |
| Kazakhstan (1995) | no | yes | non-democratic | unitary | bicameral |
| Kazakhstan (1999) | no | yes | non-democratic | unitary | bicameral |
| Kenya (1963) | UK | no | non-democratic | federal | bicameral |
| Kiribati (1978) | no | no | hybrid | unitary | unicameral |
| Korea (N) (1948) | no | no | non-democratic | unitary | unicameral |
| Korea (S) (1948) | no | no | non-democratic | unitary | unicameral |
| Korea (S) (1963) | no | no | non-democratic | unitary | unicameral |
| Korea (S) (1973) | no | no | non-democratic | unitary | unicameral |
| Korea (S) (1980) | no | no | non-democratic | unitary | unicameral |
| Kuwait (1962) | UK | no | non-democratic | unitary | unicameral |
| Kyrgyzstan (1994) | Soviet Union | no | non-democratic | unitary | bicameral |
| Kyrgyzstan (1999) | no | yes | non-democratic | unitary | bicameral |
| Laos (1953) | no | yes | non-democratic | unitary | bicameral |
| Laos (1960) | no | no | non-democratic | unitary | bicameral |
| Laos (1965) | no | yes | non-democratic | unitary | bicameral |
| Latvia (1993) | no | yes | parliamentary | unitary | unicameral |
| Lebanon (1953) | no | yes | semi-presidential | unitary | unicameral |
| Lesotho (1966) | UK | no | non-democratic | unitary | unicameral |


| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lesotho (2002) | no | no | non-democratic | unitary | bicameral |
| Liberia (1985) | no | no | non-democratic | unitary | bicameral |
| Liberia (1997) | no | yes | non-democratic | unitary | bicameral |
| Libya (1951) | no | no | non-democratic | federal | bicameral |
| Lithuania (1992) | no | no | hybrid | unitary | unicameral |
| Macedonia (1994) | no | no | non-democratic | unitary | unicameral |
| Macedonia (1998) | no | yes | non-democratic | unitary | unicameral |
| Macedonia (2002) | no | yes | non-democratic | unitary | unicameral |
| Madagascar (1960) | no | no | non-democratic | unitary | unicameral |
| Madagascar (1977) | no | no | non-democratic | unitary | unicameral |
| Madagascar (1983) | no | no | non-democratic | unitary | unicameral |
| Madagascar (1993) | no | no | non-democratic | unitary | unicameral |
| Madagascar (1998) | no | no | semi-presidential | unitary | unicameral |
| Malawi (1964) | UK | no | non-democratic | unitary | nicameral |
| Malaysia (1958) | UK | no | parliamentary | federal | icameral |
| Maldives (1968) | no | no | non-democratic | unitary | unicameral |
| Mali (1960) | France | no | non-democratic | unitary | unicameral |
| Mali (1992) | no | no | non-democratic | unitary | unicameral |
| Malta (1964) | no | no | parliamentary | unitary | unicameral |
| Marshall Isl. (1991) | US | no | parliamentary | unitary | unicameral |
| Mauritania (1960) | no | yes | non-democratic | unitary | bicameral |
| Mauritania (1992) | no | no | non-democratic | unitary | bicameral |
| Mauritius (1968) | UK | no | non-democratic | unitary | unicameral |
| Mexico (1963) | no | no | non-democratic | federal | bicameral |
| Micronesia (1991) | US | no | presidential | federal | unicameral |
| Moldova (1993) | no | yes | non-democratic | unitary | nicameral |
| Monaco (1958) | no | yes | non-democratic | unitary | unicameral |
| Monaco (2002) | no | no | parliamentary | unitary | unicameral |
| Mongolia (1949) | no | yes | non-democratic | unitary | unicameral |
| Mongolia (1992) | no | no | non-democratic | unitary | unicameral |
| Morocco (1962) | no | no | non-democratic | unitary | unicameral |
| Morocco (1970) | no | yes | non-democratic | unitary | unicameral |
| Morocco (1997) | no | yes | non-democratic | unitary | bicameral |
| Mozambique (1994) | no | yes | non-democratic | unitary | unicameral |
| Namibia (1990) | no | no | non-democratic | unitary | bicameral |
| Nauru (1968) | Australia | no | semi-presidential | unitary | unicameral |
| Nepal (1959) | no | yes | non-democratic | unitary | bicameral |
| New Zealand (1996) | no | no | parliamentary | unitary | unicameral |
| Nicaragua (1962) | no | no | non-democratic | unitary | bicameral |
| Nicaragua (1984) | no | yes | non-democratic | unitary | unicameral |
| Niger (1960) | France | no | non-democratic | unitary | unicameral |
| Niger (1993) | no | no | non-democratic | unitary | unicameral |
| Nigeria (1960) | UK | no | non-democratic | federal | bicameral |
| Pakistan (1970) | no | no | non-democratic | federal | bicameral |
| Panama (1972) | no | yes | non-democratic | unitary | unicameral |
| Panama (1980) | no | no | non-democratic | unitary | unicameral |
| Papua N. G. (1975) | no | yes | parliamentary | unitary | unicameral |
| Papua N. G. (2002) | no | yes | parliamentary | unitary | unicameral |
| Paraguay (1947) | no | yes | non-democratic | unitary | bicameral |
| Paraguay (1967) | no | no | non-democratic | unitary | bicameral |


| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Paraguay (1990) | no | yes | non-democratic | unitary | bicameral |
| Philippines (1946) | US | no | presidential | unitary | bicameral |
| Philippines (1998) | no | yes | presidential | unitary | bicameral |
| Philippines (2001) | no | no | presidential | unitary | bicameral |
| Poland (1991) | no | yes | non-democratic | unitary | bicameral |
| Portugal (1975) | no | yes | non-democratic | unitary | unicameral |
| Romania (1990) | no | yes | non-democratic | unitary | bicameral |
| Russia (1993) | no | no | non-democratic | federal | bicameral |
| Rwanda (1962) | Belgium | no | non-democratic | unitary | unicameral |
| Rwanda (1978) | no | yes | non-democratic | unitary | unicameral |
| Rwanda (2003) | no | no | non-democratic | unitary | unicameral |
| St Kitts \& N. (1983) | UK | no | parliamentary | unitary | unicameral |
| St Lucia (1979) | UK | no | parliamentary | unitary | bicameral |
| St Vinc. \& Gr. (1979) | UK | no | parliamentary | unitary | unicameral |
| Samoa (1963) | New Zealand | no | non-democratic | unitary | unicameral |
| San Marino (1951) | no | yes | non-democratic | unitary | unicameral |
| Sao T. \& Pr. (1991) | no | yes | non-democratic | unitary | unicameral |
| Senegal (1963) | France | no | non-democratic | unitary | unicameral |
| Senegal (1978) | no | no | non-democratic | unitary | unicameral |
| Senegal (1983) | no | no | non-democratic | unitary | unicameral |
| Seychelles (1976) | no | no | semi-presidential | unitary | unicameral |
| Seychelles (1979) | no | no | non-democratic | unitary | unicameral |
| Seychelles (1993) | no | no | non-democratic | unitary | unicameral |
| Sierra Leone (1961) | UK | no | non-democratic | unitary | unicameral |
| Sierra Leone (1996) | no | yes | non-democratic | unitary | unicameral |
| Singapore (1965) | no | no | non-democratic | unitary | unicameral |
| Slovakia (1993) | no | yes | parliamentary | unitary | unicameral |
| Slovenia (1991) | no | yes | non-democratic | unitary | bicameral |
| Solomon IsI. (1978) | UK | no | parliamentary | unitary | unicameral |
| Somalia (1964) | Italy | no | non-democratic | unitary | unicameral |
| Somalia (1979) | no | yes | non-democratic | unitary | unicameral |
| South Africa (1993) | no | no | non-democratic | unitary | bicameral |
| Spain (1977) | no | yes | non-democratic | unitary | bicameral |
| Sri Lanka (1948) | UK | no | parliamentary | unitary | bicameral |
| Sri Lanka (1978) | no | no | hybrid | unitary | unicameral |
| Sudan (1956) | UK | no | non-democratic | unitary | bicameral |
| Suriname (1975) | no | no | semi-presidential | unitary | unicameral |
| Suriname (1987) | no | yes | non-democratic | unitary | unicameral |
| Swaziland (1968) | UK | no | non-democratic | unitary | bicameral |
| Syria (1947) | no | no | non-democratic | unitary | unicameral |
| Syria (1973) | no | yes | non-democratic | unitary | unicameral |
| Taiwan (1946) | no | yes | non-democratic | unitary | bicameral |
| Taiwan (1991) | no | no | non-democratic | unitary | bicameral |
| Tajikistan (1994) | Soviet Union | no | non-democratic | unitary | unicameral |
| Tajikistan (1999) | no | yes | non-democratic | unitary | unicameral |
| Tanzania (1964) | UK | no | non-democratic | unitary | unicameral |
| Thailand (1997) | no | no | parliamentary | unitary | bicameral |
| Togo (1960) | no | yes | non-democratic | unitary | unicameral |
| Togo (1992) | no | yes | non-democratic | unitary | unicameral |
| Trinidad \& T. (1962) | UK | no | parliamentary | unitary | bicameral |


| Country | Colonial legacy | Regional diffusion | Form of government | Territorial organization | Chamber structure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tunisia (1959) | France | no | non-democratic | unitary | unicameral |
| Tunisia (1997) | no | no | non-democratic | unitary | unicameral |
| Turkey (1946) | no | no | non-democratic | unitary | unicameral |
| Turkey (1961) | no | no | parliamentary | unitary | bicameral |
| Turkmenistan (1994) | Soviet Union | no | non-democratic | unitary | unicameral |
| Tuvalu (1978) | UK | no | parliamentary | unitary | unicameral |
| Uganda (1980) | no | yes | non-democratic | unitary | unicameral |
| Ukraine (1993) | Soviet Union | no | non-democratic | unitary | unicameral |
| Ukraine (1997) | no | yes | non-democratic | unitary | unicameral |
| Uzbekistan (1992) | Soviet Union | no | non-democratic | unitary | unicameral |
| Vanuatu (1980) | no | no | parliamentary | unitary | unicameral |
| Venezuela (1946) | no | yes | non-democratic | federal | unicameral |
| Venezuela (1993) | no | no | presidential | federal | bicameral |
| Vietnam (1946) | France | no | non-democratic | unitary | unicameral |
| Vietnam (1976) | no | no | non-democratic | unitary | unicameral |
| Vietnam (S) (1956) | no | yes | non-democratic | unitary | unicameral |
| Yemen (1993) | no | yes | non-democratic | unitary | unicameral |
| Yemen (N) (1971) | no | yes | non-democratic | unitary | unicameral |
| Yemen (S) (1978) | no | yes | non-democratic | unitary | unicameral |
| Yugoslavia (1992) | no | yes | non-democratic | federal | bicameral |
| Yugoslavia (1993) | no | yes | non-democratic | federal | bicameral |
| Zambia (1964) | UK | no | non-democratic | unitary | unicameral |
| Zimbabwe (1980) | no | no | non-democratic | unitary | bicameral |
| Zimbabwe (1985) | no | yes | non-democratic | unitary | bicameral |

## APPENDIX IV

## Party system fragmentation

Plurality systems - change from plurality to proportional systems

| Country | Election year | Democracy | Party system fragmentation |
| :--- | ---: | ---: | ---: |
| Argentina I | 1951 | no | 1.93 |
| Argentina II | 1948 | no | 1.97 |
| Benin I | 1960 | 1.75 |  |
| Benin II | 1959 | no | 2.68 |
| Cape Verde | 1991 | 1.81 |  |
| Cyprus | 1976 | no | 1.71 |
| El Salvador | 1960 | yes | 1.28 |
| Morocco I | no | 10.71 |  |
| Morocco II | 1997 | no | 9.53 |
| South Africa I | 1993 | no | 2.69 |
| South Africa II | 1989 | no | 2.25 |
| Sri Lanka I | 1987 | no | 2.83 |
| Sri Lanka II | 1977 | yes | 3.43 |
| Turkey I | 1970 | yes | 2.47 |
| Turkey II | 1957 | yes | 2.18 |

Plurality systems - change from plurality to mixed systems

| Country | Election year | Democracy | Party system fragmentation |
| :--- | ---: | ---: | ---: |
| Greece | 1952 | yes | 2.71 |
| Japan I | 1993 | yes | 5.01 |
| Japan II | 1990 | yes | 3.34 |
| Lesotho I | 1998 | no | 2.28 |
| Lesotho II | 1993 | no | 1.64 |
| Mexico I | 1961 | no | 1.22 |
| Mexico II | 1958 | no | 1.27 |
| New Zealand I | 1993 | yes | 3.53 |
| New Zealand II | 1990 | yes | 2.78 |
| Philippines I | 1994 | yes | 4.82 |
| Philippines II | 1990 | yes | 4.98 |
| South Korea I | 1960 | no | 5.61 |
| South Korea II | 1958 | no | 3.42 |
| South Korea III | 1978 | no | 4.68 |
| South Korea IV | 1973 | no | 3.76 |
| Thailand I | 1996 | yes | 4.61 |
| Thailand II | 1995 | yes | 6.81 |
| Tunisia | 1989 | no | 1.54 |

Plurality systems - comparison group

| Country | Democracy | Party system fragmentation |
| :--- | ---: | ---: |
| Antigua and Barbuda | no | 2.09 |
| Bahamas | yes | 2.34 |
| Bangladesh | no | 2.59 |
| Barbados | yes | 1.98 |
| Belize | yes | 2.04 |
| Botswana | yes | 2.44 |
| Canada | yes | 3.77 |
| Djibouti | no | 1.88 |
| Dominica | yes | 2.55 |
| Grenada | yes | 2.27 |
| India | yes | 3.92 |
| Jamaica | yes | 2.02 |
| Malawi | no | 2.86 |
| Malaysia | no | 2.23 |
| Mongolia | yes | 2.40 |
| Nigeria | no | 2.62 |
| Pakistan | no | 6.34 |
| Samoa | yes | 3.90 |
| St Kitts and Nevis | yes | 2.70 |
| St Lucia | yes | 2.33 |
| St Vincent and Grenadines | yes | 2.05 |
| Trinidad and Tobago | yes | 2.11 |
| United Kingdom | yes | 3.33 |
| United States | yes | 2.11 |
| Yemen | no | 2.57 |
| Zambia | no |  |
| Zimbabwe | no |  |

Proportional systems - change from proportional to plurality systems

| Country | Election year | Democracy | Party system fragmentation |
| :--- | ---: | ---: | ---: |
| Congo (-Kinshasa) I | 1965 | no | 8.50 |
| Congo (-Kinshasa) II | 1960 | no | 8.38 |
| Greece I | 1951 | 4.15 |  |
| Greece II | yes | 8.01 |  |

Proportional systems - change from proportional to mixed systems

| Country | Election year | Democracy | Party system fragmentation |
| :--- | ---: | ---: | ---: |
| Egypt | 1984 | no | 1.78 |
| Italy I | 1948 | yes | 2.95 |
| Italy II | 1946 | yes | 4.69 |
| Italy III | 1992 | yes | 6.64 |
| Italy IV | 1987 | yes | 4.62 |
| Paraguay | 1963 | no | 1.17 |
| Senegal | 1978 | no | 1.43 |

Proportional systems - comparison group

| Country | Democracy | Party system fragmentation |
| :---: | :---: | :---: |
| Austria | yes | 3.02 |
| Belgium | yes | 8.85 |
| Benin | yes | 2.01 |
| Bosnia-Herzegovina | no | 8.99 |
| Bulgaria | yes | 3.95 |
| Burkina Faso | no | 3.67 |
| Cambodia | no | 3.17 |
| Chile | yes | 2.33 |
| Colombia | no | 8.66 |
| Costa Rica | yes | 4.53 |
| Cyprus | yes | 3.78 |
| Czech Republic | yes | 4.82 |
| Denmark | yes | 4.69 |
| Dominican Republic | yes | 3.13 |
| El Salvador | yes | 4.08 |
| Estonia | yes | 5.43 |
| Finland | yes | 5.92 |
| Greece | yes | 2.64 |
| Guatemala | no | 6.57 |
| Guyana | yes | 2.19 |
| Honduras | yes | 2.58 |
| Iceland | yes | 3.93 |
| Indonesia | no | 9.07 |
| Ireland | yes | 4.14 |
| Israel | yes | 7.06 |
| Latvia | yes | 6.82 |
| Liberia | no | 1.73 |
| Liechtenstein | yes | 2.35 |
| Luxembourg | yes | 4.60 |
| Malta | yes | 2.02 |
| Moldova | yes | 3.02 |
| Namibia | yes | 1.67 |
| Netherlands | yes | 4.99 |
| Nicaragua | yes | 2.17 |
| Niger | no | 4.42 |

Proportional systems - comparison group, continued

| Country | Democracy | Party system fragmentation |
| :--- | ---: | ---: |
| Norway | yes | 6.19 |
| Paraguay | yes | 4.21 |
| Peru | yes | 6.63 |
| Poland | yes | 4.50 |
| Portugal | yes | 3.15 |
| Romania | yes | 5.38 |
| San Marino | yes | 3.55 |
| Sao Tome and Principe | yes | 2.94 |
| Slovakia | yes | 8.86 |
| Slovenia | yes | 5.13 |
| South Africa | yes | 1.97 |
| Spain | yes | 3.13 |
| Sri Lanka | yes | 2.71 |
| Suriname | yes | 3.77 |
| Sweden | yes | 4.53 |
| Switzerland | yes | 4.69 |
| Turkey | no | 5.44 |
| Uruguay | yes | 2.61 |

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Why have countries in different parts of the world preferred different electoral systems? Does context matter when countries choose electoral systems? Specifically, which contextual factors are decisive? In the present thesis, Krister Lundell explores these questions from three theoretical perspectives: a rational, a cultural and historical, and an institutional perspective.

The results show that although some institutional choices may be influenced by other particular institutions, the overall constitutional framework does not determine the choice of electoral systems. The rational perspective also provides a rather weak explanatory model. However, party system transformation from authoritarian one-party rule to competitive politics often results in a replacement of majoritarian systems with proportional or mixed electoral systems.

The impact of the cultural and historical setting is overwhelming. Electoral system choice is to a great extent a consequence of various processes of diffusion, particularly British colonialism and regional contacts. Specific temporal trends are also discernible - the popularity of mixed systems in recent times is a case in point.



[^0]:    ${ }^{1}$ The term gerrymander is derived from the name of Governor Elbridge Gerry of Massachusetts, whose state administration passed a law in 1812 dividing the state into new senatorial districts, and the outline of one of these districts, which was thought to resemble a salamander (Encyclopedia Americana 1982: 702).

[^1]:    ${ }^{2}$ Lebanon is divided into 14 multi-member districts with fixed proportional seat quotas for the religious sects of the country (Scheffler 2001).

[^2]:    ${ }^{3}$ Most authors also ignore the distinction between SMP and BV, probably because they are concerned with the developed world, in which the block vote has not been applied for several decades.

[^3]:    ${ }^{4}$ The supplementary vote, which is used for presidential elections in Sri Lanka, can be seen as a mixture of AV and TBM. Voters make their preferences on the ballot paper in the same way as under AV. If one candidate receives an absolute majority of first preferences, he or she is elected. If no winner is found on the basis of first preferences, all candidates bar the top two from the count are eliminated, and all available preference votes marked for one or the other of these two leaders are redistributed to determine the winner. In that case, the alternative vote method becomes a run-off election in one round. This system has never been used for national elections (Reilly 2001: 1617).
    ${ }^{5}$ If each of the other candidates is preferred to a particular candidate, he is called a Condorcet loser. A Condorcet winner is a candidate who, in comparison with every other candidate, is preferred by a majority. Another criterion, the Borda count, is not concerned with winners and losers in pair-wise comparisons but with excluding alternatives that occupy poorer than average positions in individual preference orderings. The voters' preferences determine the score of alternatives, and the alternative with the largest sum of scores is the Borda winner (Nurmi 1983: 187, 192; 1988: 130).

[^4]:    ${ }^{6}$ There has been some disagreement among scholars whether STV should be regarded as a proportional formula or not. In Norris' classification, for instance, STV is treated as a semi-proportional formula along with CV and LV (1997: 297-312).
    ${ }^{7}$ Siavelis and Valenzuela (1996: 77-99) regard the Chilean electoral system as majoritarian despite the use of the d'Hondt formula for seat allocation. Because of the lowest possible district magnitude a PR system can have, this system operates very much like a majoritarian one. One reason for introducing this electoral system was to avoid the polarized multiparty system that had characterized much of Chile's pre-authoritarian history, and create a two-party system. Nevertheless, this is technically a PR system, and like Jones (1995), I classify the Chilean system as list PR.

[^5]:    ${ }^{8}$ Nominal voting does not necessarily guarantee personal voting: the nominal vote may be cast for a given candidate solely on the basis of the candidate's party.

[^6]:    ${ }^{9}$ In the 1999 elections, the number of compensatory seats was increased to 34 . However, the allocation of compensatory seats may be regarded as a façade of open debate and multipartism. In practice, the Tunisian political system is controlled by the ruling RCD, and the elections are usually marred by fraud and other irregularities (Freedom in the World 2000-2001: 541-544).

[^7]:    ${ }^{10}$ The reason why STV is treated as a basic type of electoral system along with the first-past-the-post, semi-PR and PR may be attributed to the pro-STV nature of the book.

[^8]:    ${ }^{11}$ The French term panachage implies that voters are entitled to cast multiple votes and to split their votes between candidates in one list as well as between lists.

[^9]:    ${ }^{12}$ The matter of separating democracies from non-democracies is dealt with in section 4.2.

[^10]:    ${ }^{13}$ When Papua New Guinea became independent in 1975, an electoral reform replaced AV with SMP, which resulted in a highly fragmented party system and less accommodatory political behavior. AV was reintroduced in 2002.

[^11]:    ${ }^{14}$ A divided society is a term used for describing a society which is ethnically diverse, and where ethnicity is a politically salient cleavage around which interests are organized for political purposes (Reilly 2001: 4).

[^12]:    ${ }^{15}$ For instance, the Sudan, Sri Lanka, Chad, Benin, Kenya, Nigeria, Congo (Brazzaville) and Guyana are countries that have, or have had party systems clearly based on ethnic parties (Horowitz 1985: 302).

[^13]:    ${ }^{16}$ The supplementary vote (SV) is another electoral system that promotes interethnic accommodation. It has never been used in national legislative elections.

[^14]:    ${ }^{17}$ Reference is made to Reynolds' summary of Lijphart's critique of AV instead of the original source by Lijphart, because Reynolds' reference is incorrect.

[^15]:    ${ }^{18}$ Plurality and majority systems are treated as a single category of electoral systems. Mixed systems and proportional systems constitute the other major types of electoral systems. Among the majoritarian systems, the plurality formula is considerably more frequent than the majority formula.

[^16]:    ${ }^{19}$ The reason for not treating the other basic type of majoritarian elections, i.e. majority systems, alongside of plurality systems is explained in section 3.3.1.3.

[^17]:    ${ }^{20}$ In this connection, the term multi-party system implies the existence of several parties and parliamentary elections being contested by several than one party, i.e. the opposite of one-party system. A more common procedure is to conceive multi-party system as the main alternative to two-party system in democracies.

[^18]:    ${ }^{21}$ This should be emphasized in particular concerning the analysis of regional diffusion. The introductory analysis is restricted to observing whether processes of regional diffusion have occurred by means of some specified criteria presented in section 3.3.2.2.

[^19]:    ${ }^{22}$ Democracies (1984) consists of 21 countries and Patterns of Democracy (1999) examines 36 countries that meet democratic standards.

[^20]:    ${ }^{23}$ STV is certainly applied in Ireland and Malta as well, but some vital characteristics of integrative consensualism are lacking, such as the presence of deep cleavages and a high degree of ethnic fragmentation.

[^21]:    ${ }^{24}$ The following correlation values have been reported: 0.69 (Dahl and Tufte 1973: 17), 0.83 (Hadenius 1992: 126), and 0.87 (C. Anckar 1998: 56).

[^22]:    ${ }^{25}$ See e.g. Duverger (1964) for a description of the psychological and the mechanical effect of electoral systems on party systems.

[^23]:    ${ }^{26}$ This relationship is theoretically described in section 3.2.1. See also Cox (1997: 137).

[^24]:    ${ }^{27}$ An inclusion of majority systems would only slightly increase the number of cases. Furthermore, approximately half of all cases would be French elections.

[^25]:    ${ }^{28}$ In e.g. Benin, list PR has officially been in force since the 1964 elections, even though multi-party elections did not take place until 1991 (Hartmann 1999a: 82-83).

[^26]:    ${ }^{29}$ In May 1992, Yugoslavia adopted mixed-superposition after having previously applied SMP. In the 1993 and 1996 parliamentary elections, list PR was applied.

[^27]:    ${ }^{30}$ A plurality system has been used ever since the first elections.

[^28]:    ${ }^{31}$ The colonial power certainly played a great role in the constitution-writing process in several former colonies (see e.g. Ghai 1988), but the native leadership took at least part in the decisions on the future constitutional framework of the nation.

[^29]:    ${ }^{32}$ Note that this value is not the same as turnout, since turnout in elections is based on the size of the electorate - not the total population.
    ${ }^{33}$ Correlation coefficients are negative, because Freedom House ratings rise with the decline of democratization, whereas Vanhanen's indices rise with the increase of democratization.

[^30]:    ${ }^{34}$ Arguments for classifying cases into either democracies or non-democracies between 1945 and 1974 are given in Appendix I. Freedom House certainly provides ratings as of 1972 but since a sufficient level of democracy is required every single year between the choice of electoral system and the previous elections, further information is needed for evaluating cases at the beginning of the period covered by Freedom House.

[^31]:    ${ }^{35}$ Rokkan (1970) observed that ten small European states of totally eleven, i.e. all Western European countries with less than ten million people, except for the Netherlands, applied proportional systems. In contrast, all larger Western European states had stuck to their majoritarian systems or switched back and forth between majoritarian and proportional voting methods.

[^32]:    ${ }^{36}$ If majority systems had been included in the comparison group, this category would have been enlarged with the cases of France, Australia and Mauritania. As suspected, the average level of party system fragmentation in these majority countries is considerably higher - 3.81 - than among plurality countries. The group of electoral system change would have been enlarged with (four) elections in one country only, France.

[^33]:    ${ }^{37}$ I should be observed that the analysis in this section also consists of some electoral system changes that are not observed as reforms in the main database, since the changes in question took place prior to independence - the Baltic region is a case in point. This matter concerns totally seven of the 62 cases above.
    ${ }^{38}$ These countries are Albania, Algeria, Armenia, Azerbaijan, Cape Verde, Kyrgyzstan, Poland, Tajikistan and Ukraine.

[^34]:    ${ }^{39}$ Actually there were two British sections. The Northern section voted for integration into Nigeria, whereas the Southern section decided to join the Republic of Cameroon (Mehler 1999a: 167).

[^35]:    ${ }^{40}$ In multivariate logistic regression analysis, a nominal dependent variable with three or several categories does not constitute any problem, because each category is compared to all other categories separately.

[^36]:    ${ }^{41}$ The total number of cases is 35 , because Vanuatu is coded as both a British and a French colony.

[^37]:    ${ }^{42}$ Actually to the electoral law, a mixed system is still applied. However, the magnitude of the nationwide constituency was reduced from 52 to merely 5 seats prior to the 2001 elections, which means that the Philippino electoral system is practically a plurality system (at the end of 2003). The number of single-member districts is 209 .

[^38]:    ${ }^{43}$ These are East Germany 1949 and Bulgaria 1953 as well as 1956.

[^39]:    ${ }^{44}$ Spearman's rho is 0.688 in the total sample, and 0.705 in the sample of democracies.

[^40]:    ${ }^{45}$ When countries with less than 1 million people are excluded, the correlation coefficient between population size and plurality systems is 0.286 and far from significant, compared to 0.47 among all democratic cases.

