

# Playing by the Rules: The Impact of Electoral Systems on Emerging Green Parties

By

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Masters of Arts

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**Playing By the Rules:  
The Impact of Electoral Systems  
on Emerging Green Parties**

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**Abstract:**

A strange political phenomenon is occurring across Europe and throughout many other western nations, one that is known as the “green party phenomenon” (Müller-Rommel 1989). As concern for the environment increases throughout much of the developed world, citizens have joined together to give a voice to the fragile ecosystem in which we live. For the past forty years green parties have formed in numerous countries and their impact is being noticed in Congresses, Parliaments, and other legislatures around the world. But what determines whether or not these new parties will survive? The electoral system in which a party emerges is a key factor in the party’s rate of success. This essay provides an overview of ten of the electoral systems currently in use around the world today. A concentrated look at each electoral system gives us a better understanding of how parties operate within the rules, each system.

By delving deeper and exploring a few nations that use each system, we can uncover which electoral systems tend to promote Green Party emergence and growth. The nations used in this study range from Scandinavia to the South Pacific, from Canada to Cameroon. Just as there are minor differences that make the electoral system use in each country unique, there are veritable distinctions between Green Parties in each nation. After exploring electoral systems in greater depth, I find that more Green Parties currently operate in proportional representation systems than in any other electoral system. Furthermore, plurality systems are least likely to host a Green Party.

*For my family, who never let reality get in my way and who gave me more ambition  
and determination than I can use in a lifetime -  
And for Eric, who helped me stay sane enough to commit this otherwise  
completely irrational act.*

## **Acknowledgements**

I would like to acknowledge a few of the many professors who have helped me to reach the point where I am today. As Henry Adams said, “A teacher affects eternity; he can never tell where his influence stops.” There have been many who have inspired me, but space gives me room for just a few.

I must first give credit to my political science professors at Vanderbilt University. They may never know of their influence upon me, but I give them credit for turning an interest in politics into a passion. Bradley Palmquist was the first to ever introduce me to the fascinating world of electoral systems. Dr. Stefanie Lindquist was a role model for me in every respect of the word. Lastly, Professors Bruce Oppenheimer, John G. Geer, and the late George Graham reminded me how much fun learning can be and that nothing about political science is ever boring. These professors and more paved the road for me to come to graduate school.

Upon arriving at the University of Kansas I was met by Dorothy Daley. She was fun, she was Canadian, but most importantly, she concentrated her work on environmental issues. It was not difficult to decide that she should be a member of my graduate committee. Professor Ronald Francisco tried his best to teach me statistics and comparative politics. His dry sense of humor and uncanny knack for when to throw in a joke made his classes more than just a learning experience. I appreciate his willingness to chair my committee and to help direct me in my graduate path. Lastly, I want to acknowledge Professor Allan Cigler. Not only did he agree to be on my committee, but he has never held my “Republican-ness” against me.

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## **Chapter 1: A Brief Introduction**

- 1.1 Introduction
- 1.2 Defining Green Parties
- 1.3 The Significance of Electoral Systems

### *1.1 Introduction*

A strange political phenomenon is occurring across Europe and throughout many other western nations, one known as the “green party phenomenon” (Müller-Rommel 1989, 1). As concern for the environment increases throughout much of the developed world, citizens have joined together to give a voice to the fragile ecosystem in which we live. For the past forty years green parties have formed in numerous countries and their impact is being noticed in congresses, parliaments, and other legislatures around the world. With their arrival on the scene one might question the consequences of their arrival, their influence in national government, and if such groups are here to stay. After delving into what constitutes a green party, we will then turn our focus to what electoral systems are and why they are so significant in the study of political parties.

### *1.2 Defining Green Parties*

Although difficult to define what constitutes a green party, a definition is critical if we are to study them. Traditionally, Greens follow an ideology that is strongly environmental, anti-nuclear power, peace-seeking, heavily concerned with equality and human rights, grounded in traditions of sustainable development, and generally thought of as left-wing (Müller-Rommel 1989). Those who support Green parties are often “Young, well-educated, and secular” (Siaroff 2000, 14). Greens tend to place less emphasis on the accumulation of material goods and instead stress individualism and

self-determination. Most green parties focus on organization at the individual level and are known for their grassroots approach to gaining support (Müller-Rommel 1989).

Green parties are also unique in that they do not always align themselves easily along the left-right party system structure targeting issues from both sides of the conventional spectrum. Green parties, “Challenge the stability of the established political constellation by adding a ‘new’ conflict dimension to the traditional left-right party system cleavage structure without breaking down the primary cleavage structures” (Müller-Rommel 1989). The first Green Party was started in the late 1960s in New Zealand, the Values Party, and many have consequentially been created (Müller-Rommel 1989). The most successful development of Green Parties has been in Europe where one finds that, “Green parties exist in nearly all Western European party systems” (Müller-Rommel 1989, 9).

As is the case for many other ‘minor parties,’ Greens are seen as unimportant, perhaps because they are thought to have little impact on the system. When collecting data on votes for political parties, green parties are aggregated into the category of “other,” emphasizing their minority status. However, this research is important as green parties bring an alternative option to the ballot box offering a voice to those who may feel ignored by the larger more established parties as well as possibly mobilizing a new section of the electorate.

### *1.3 The Significance of Electoral Systems*

As noted, green parties are emerging all around the world, not just in one particular region. Although they share many features in common, no two Green Parties are the same. One of the greatest factors in determining whether these newly emerging

parties are able to survive or not, is the electoral system into which each is born. The following chapter will explore electoral systems as an area of research in greater depth.

The choice that is made in deciding by which electoral system a country will elect its officials is one of the most important choices the nation can possibly make. The electoral system has an acute effect on how politicians will act, how many political parties will exist, the strategies that politicians and parties choose, and what actions the voters will take. In regard to parties, centralized systems that use List Proportional Representation are likely to lead to strong parties whereas district-based decentralized systems frequently have weaker parties (International IDEA 2005). Once an electoral system is chosen it is unusual that the nation will ever change it, although reform does occur. (International IDEA 2005).

The importance of electoral system can not be overstated. Therefore, Chapter 2 will look at the history of electoral systems and how they can be classified. Chapters 3 through 6 will each focus on a particular subgroup of electoral system and the nations that use them. Following a discussion of a particular nation, I present a brief introduction to the green party within that nation (if indeed one does exist). The end of each chapter provides a summary of the advantages and disadvantages offered by each electoral system. The final chapter will discuss which electoral systems appear to be the most 'friendly' towards green or ecology parties and which tend to inhibit green party growth.

## Chapter 2: Introduction to Electoral Systems

- 2.1 Importance of Electoral Systems
- 2.2 History of the Subfield
- 2.3 Classification of Electoral Systems

### *Importance of Electoral Systems*

What is an electoral system and why is it so important? An in-depth look at electoral systems will not explain *why* people vote as they do, but it does explain *how* they vote. An electoral system is “One part of the electoral law<sup>1</sup> which specifically deals with the final determination of who is elected. Electoral systems determine the means by which votes are translated into seats in the process of electing politicians into office” (Farrell 2001, 210). An alternative definition offered by Douglas Rae, acclaimed electoral system scholar, identifies electoral laws as, “...those which govern the processes by which electoral preferences are articulated as votes and by which these votes are translated into distributions of governmental authority (typically parliamentary seats) among the competing political parties” (Rae 1967, 14).

The study of electoral systems is justifiable because of the central role played by elections in so many democracies around the world (Taagepra and Shugart 1989). No other element is more important in determining how a political system will perform and function than the electoral system that defines it. Electoral systems are so important that they have been referred to as “the cogs that keep the wheels of democracy properly functioning” (Farrell 2001, 2). Although the physical process of voting is similar in any electoral system (select a ballot, mark your preference secretly, and deposit the ballot),

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<sup>1</sup> Electoral Laws are “the family of rules governing the process of elections” (Farrell 2001, 3). This includes the nomination phase, the campaigning, and all other events leading up to the election results. Also included under electoral laws are the rules stating who is eligible to vote and if voting is a compulsory act or not.

the ways of doing so vary from one country to the next. It is the electoral system that determines which parties have a greater ability to get into public office as well as which candidates will be, and which will not be, elected.

Electoral systems are also important to understand, as they remain a critically relevant political issue. As democratization has increased around the globe, newly formed countries, many of which have decided to pursue proportional representation, are making a decision as to what happens after the campaigning season has ended and the votes have been cast. Also the past decade has seen an increasing number of electoral reforms take place such as New Zealand's switch to a mixed system in 1993 and Italy's decision to adopt a mixed system in the 1990s (Farrell 2001).

## *2.2 History of the Subfield*

Ever since the first vote was cast, there has been a method of counting the votes to determine a winner. As nations formed, elites determined how votes would be counted, what constituted a valid or invalid vote, what the ballot would look like, and who would be responsible for printing the ballot. However, it has only been in recent years that the study of electoral systems has begun to gain the respect that it deserves. The history of electoral systems spans 150 years and in spite of numerous bright scholars researching this political subfield, much remains to be explored.

The history of electoral studies can be traced back as far as Thomas Hare's 1859 proposal for a new electoral system in Ireland and Great Britain that is now known as single transferable vote. Hare's plan sparked John Stuart Mill to write *Considerations on Representative Government* in 1861. Mill's work in turn brought about the first generation of research on comparative electoral systems (Shugart 2005). First there was

a largely descriptive analysis of electoral systems was published in 1918 entitled *How the World Votes* by Charles Seymour. Shortly thereafter Hoag and Hallet (1926) advocated proportional representation systems (PR systems) in their book *Proportional Representation*. Primarily these early works were based upon observations of how electoral systems were used around the world and in some cases these works promoted change.

In 1954 Duverger questioned the relationship between electoral systems and the number of parties that could exist. His almost sociological questioning of a political system helped to shift the scholarly focus away from the mechanics of electoral systems and onto the consequences of various systems (Shugart 2005). Using the election itself as the unit of analysis, Douglas Rae wrote a seminal work in 1967 in which he discovered that district magnitude has a greater effect on proportionality than does the electoral formula (Rae 1967). New areas were explored looking at how electoral systems influence parties and voters. Questions started to emerge regarding how electoral systems affect proportionality, political behavior, and democratic quality (Shugart 2005). Although scholars continued to build upon the academic foundations of electoral system research, Arend Lijphart wrote as recently as 1985 that the field of electoral studies was still underdeveloped (Lijphart 1985).

Great advances have been made in electoral system studies since 1985. Most noticeably, it has become easier to gain access to data in other nations. The raw data concerning the number of eligible voters, votes cast, invalid votes, electoral laws, and the translation from votes into seats is more accessible today than ever before. Utilizing some of this newly accessible data, although not delving into many specific national

studies, Taagepera and Shugart (1989) offer a solid overview of how electoral systems function around the world. They provide a substantial empirical analysis of electoral systems and the factors that affect how votes translate into seats.

One of the first great studies that comprehensively compared various electoral systems around the world was written by Arend Lijphart (1994) entitled, *Electoral Systems and Party Systems*. Lijphart explores the lower house elections in 27 democracies from 1945 to 1990. His data show that threshold is the strongest indicator of proportionality, but notes that electoral formulae and the size of the assembly also have a large effect (Lijphart 1994). Unlike Rae, Lijphart uses electoral systems as the unit of analysis and regards sequential elections as repeated observations (1994). Lijphart also modestly states that every scholar will define electoral systems in a unique way and therefore he attempts to make his data clear, concise, and available for re-analysis.

Gary Cox offers a look at how voters, interest groups, and politicians solve ‘coordination’ problems<sup>2</sup> when choosing electoral systems in his 1997 book *Making Votes Count: Strategic Coordination in the World’s Electoral Systems* (Cox 1997). The first part of this book explores electoral systems that are currently in use. In the latter half of this book, Cox delves into the political party process in more depth. He feels that when political elites decide what party to join they weigh the difficulty of gaining a party endorsement against the advantage they expect to receive from gaining a party label. As this benefit is traditionally derived only from major parties, there is a natural incentive to neither join nor create new parties.

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<sup>2</sup> By ‘coordination problems’ the author is referring to the combination of shared and opposed interests that can be found in every election.

In 1997 another major work that added to our knowledge of electoral systems was published: *Democracy and Elections* by Richard S. Katz. Katz's book investigates what it means to be a democracy and how democracy is institutionalized (1997). In his description of electoral systems, Katz looks at the translation of votes into seats, the nature of choice offered to voters, access to the ballot box (suffrage and registration processes), and how candidates emerge (Katz 1997).

After publishing the first edition in 1997, in 2001 David M. Farrell published *Electoral Systems: A Comparative Introduction*, the second version of his studies on electoral systems. After clarifying the need to study electoral systems, Farrell distinguishes between the various 'families' of electoral systems. For each grouping of systems he gives examples of nations that use it as well as the history of the system. Although his study is easy to read and comprehend, he neglects to address single non-transferable voting and parallel voting in any real depth.

Gallagher and Mitchell joined forces in 2005 to produce an edited volume which is helpful in identifying details of electoral systems by focusing each chapter on a single nation. This allows for great depth of knowledge of how an electoral system actually operates in practice, but it lacks the breadth of most comparative studies. The authors note that with their volume they hoped to fill the void that existed by looking at how each electoral system actually operates by using real world analyses.

In spite of these many advances, there will always be room to continue research in this field. Theoretically there are an infinite number of ways to allocate seats based upon the votes received. Therefore there are countless ways to study electoral systems and a myriad of essays that could be written. For example, one can look at the electoral choices

made by emerging democracies within a particular geographic area or the decisions made by nations that were democratizing at the same time (a chronological approach). Or, research can be done that questions the recent transition of certain nations to mixed systems, attempting to explain why nations are pushing for electoral reform, which systems they are abandoning, and why so many are turning to mixed systems. Furthermore, one can posit the question of whether or not this trend will be repeated in the twenty-first century.

### *2.3 Classification of Electoral Systems*

Douglas Rae (1967) described the three defining elements of an electoral system as the ballot structure, the district magnitude, and the electoral formula. Each of the three components offers a way to compare the diverse electoral systems that exist. The ballot structure provides a way to distinguish between cardinal ballots where voters choose one of many candidates and ordinal ballots where voters must rank candidates in order of preference.

District magnitude refers to the number of candidates that are elected within each constituency. In the United States House of Representatives, this refers to the single candidate elected per congressional district. In other nations, such as Spain, each constituency elects an average of seven legislators per district (Farrell 2001). The physical size of the district varies from a tiny region within a nation to instances such as Israel, where the district boundaries are the entire country itself.

The third element necessary to understanding electoral systems is electoral formula. Theoretically there are an infinite number of electoral formulas that could exist, but there are only a few that actually are used in practice. The electoral formula

determines how the votes that are cast are then allocated into seats. Although the district magnitude arguably has the most influence on the proportionality of the electoral system, this discussion will be divided into nations that use the various electoral formulas and how each formula impacts the likelihood of a small party, such as a Green Party experiencing success (Farrell 2001).

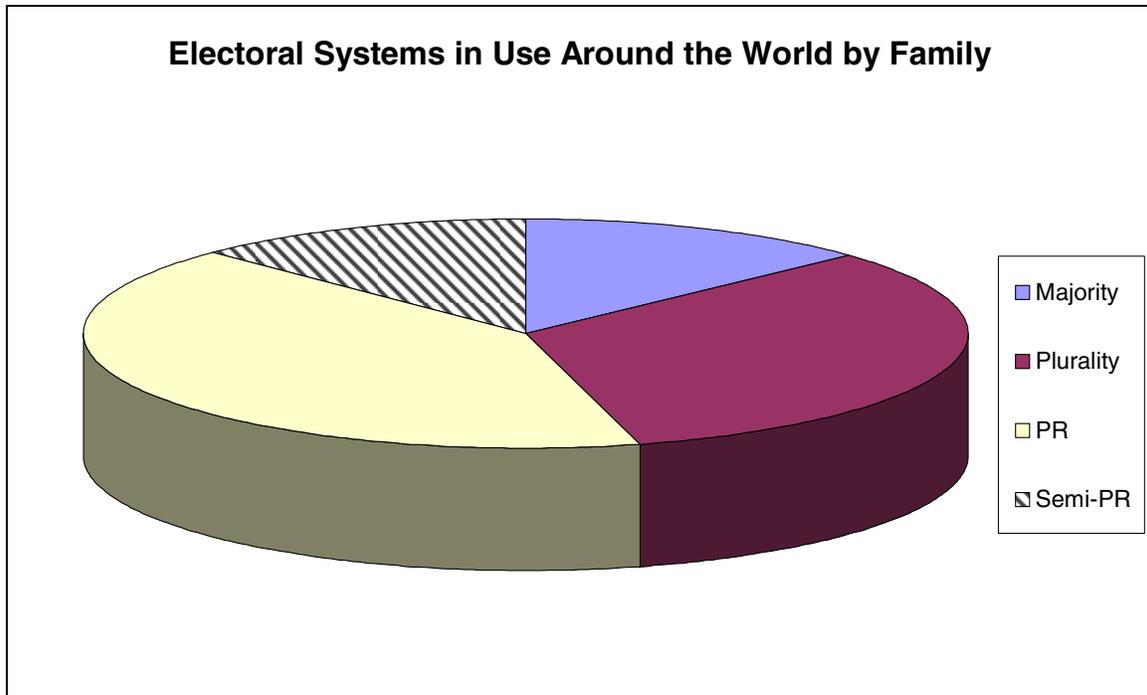


Fig 2.1) Electoral Systems in Use around the World Divided Into Four Major Categories or Families  
Source: Much of the data used in the creation of this chart comes from the International Institute for Democracy and Electoral Assistance (International IDEA 2005); Graph created by author

The following chapters will provide a look at each of the major groups of electoral formulas: plurality, majority, proportional, and those that can be categorized as only semi-proportional at best (See Figure 2.1)<sup>3</sup>. Each of these three major groupings can be subdivided into a total of ten smaller units, which allows us to explore each unique set of

<sup>3</sup> A complete index of the nations and the electoral systems that they use (the information used in this chart and all other related graphics) can be found in Appendix A.

electoral systems in turn. The frequency of each of these sub-families is portrayed in Fig 2.2.

My personal display of how the numerous electoral systems are interrelated is shown in Figure 2.3. At this point it is important to note that not all scholars use this particular schema to define electoral systems. For example, Reilly and Reynolds, portray the world of electoral systems as having three major branches (plurality-majority, semi-PR, and proportional representation) and eleven minor branches (Reilly and Reynolds 1999). The International Institute for Democracy and Electoral Assistance chooses to have four main branches (plurality-majority, mixed, proportional representation, and other) and twelve minor branches (International IDEA 2005). Just as every scholar appears to have a favorite method of seat allocation, perhaps each scholar also has a preferred method of depicting the electoral system family tree.

To learn how each electoral system affects the ability of political parties such as the Green Parties to prosper, each chapter will begin with an introduction of how the electoral formula functions followed by a sampling of nations that use it, and the success of Green Parties within each of those nations.

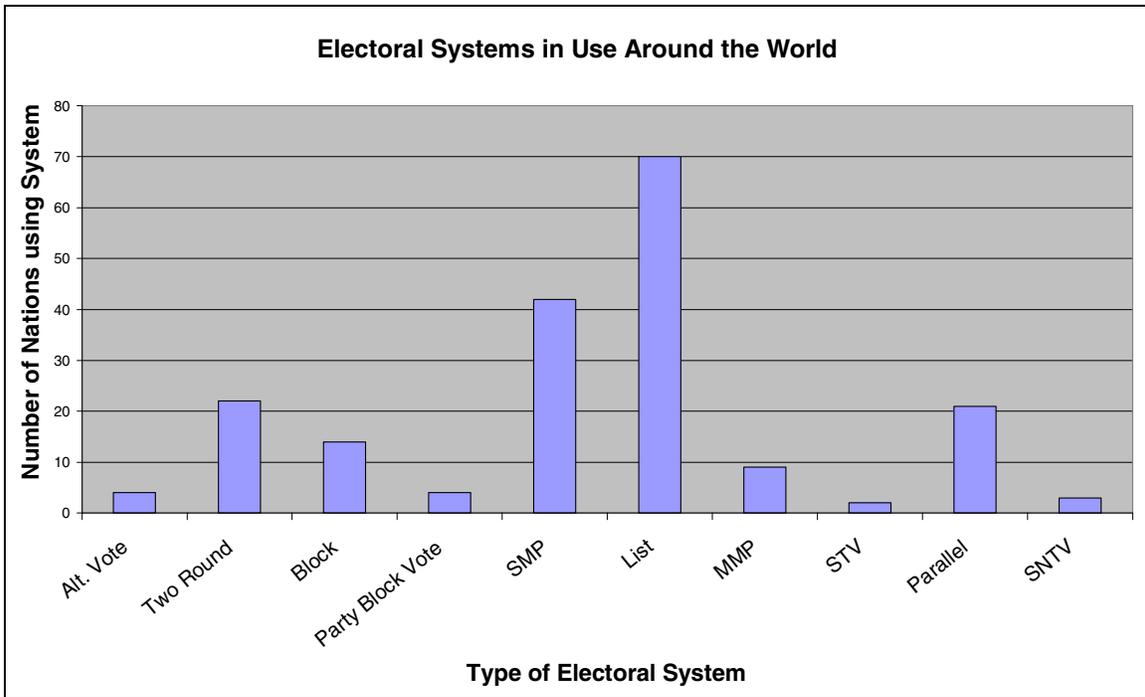


Fig 2.2) Frequency of Electoral Systems around the World Divided by Sub-Family  
 Source: Much of the data used in the creation of this chart comes from the International Institute for Democracy and Electoral Assistance (International IDEA 2005); Graph created by author

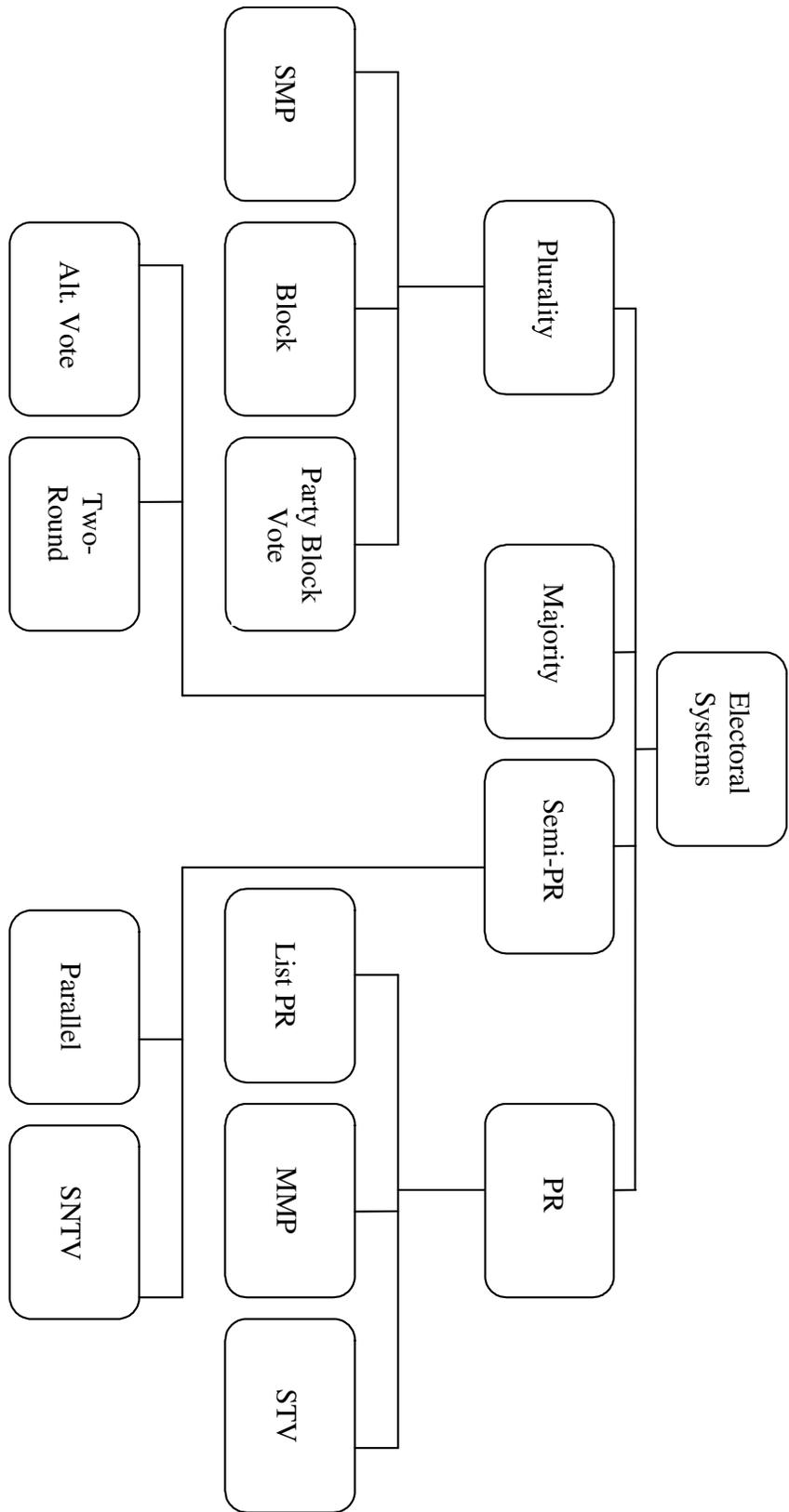


Fig 2.3) The Electoral System “Family Tree” as portrayed by the author

## Chapter 3: The Plurality Systems

- 3.1 Overview of the Plurality System
- 3.2 The First-Past-the-Post / SMP
  - 3.2.1 The United States Greens
  - 3.2.2 The Canadian Greens
- 3.3 The Block Vote
  - 3.3.1 Lebanon – The Block Vote
- 3.4 The Party Block Vote
  - 3.4.1 The Greens of Cameroon
- 3.5 Conclusion of Plurality Effects

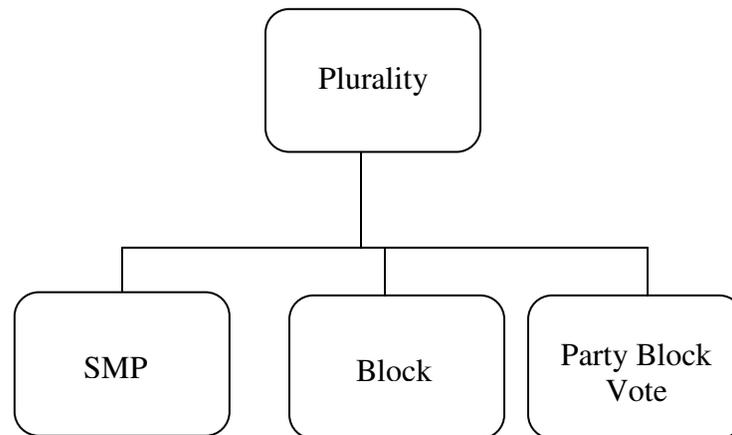


Fig 3.1) The Plurality Branch of the Electoral System Family Tree

### *3.1 Overview of the Plurality System*

In order to be elected in a plurality system a candidate must receive or win a plurality of the votes. As such, any winners are not recipients of the majority support they only have to acquire more votes than any other candidate. There are three main subcategories of plurality systems, the single member plurality (SMP) or first-past-the-post system, the block vote, and the party block vote.

### *3.2 The First-Past-the-Post / SMP*

The most common plurality system is the SMP system. Also known as the relative majority or the first-past-the-post, this method is used predominately in the

United States, the United Kingdom, India, and Canada<sup>4</sup>. This process is favored for its straightforwardness and the ease with which voters can understand it. Along with majority systems, which will be discussed in the next chapter, plurality systems meet the social choice requirements for democracy. All that is required of the voter is to cast a vote for the candidate which he or she most favors and then return the ballot. When determining who should be elected, it is whoever gets the plurality of the vote. In SMP votes are cast for candidates themselves, not for parties or lists as will be seen in future discussion.

Plurality systems are also favored by those who prefer constituency representation (Farrell 2001). Each elected representative is responsible to a constituency. These elected officials are approachable by the electorate and can be held accountable for their actions. Farrell notes that this feature is the distinguishing attribute of the SMP system, which distinguishes it from proportional systems. Although the actual number of districts varies from one nation to the next, all maintain the single-member constituencies. In the United States there are 435 districts, in the United Kingdom 625; all of which elect a representative giving each constituency a district magnitude of one (Siaroff 2000). As mentioned, district magnitude is the factor that most affects proportionality, therefore SMP systems are seen as the least proportional when compared to other electoral systems (Farrell 2001).

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<sup>4</sup> Other nations that use SMP systems include Antigua and Barbuda, the Bahamas, Bangladesh, Barbados, Belize, Bermuda, Botswana, the Cook Islands, Dominica, Ethiopia, Cambodia, Ghana, Grenada, Jamaica, Kenya, Madagascar, Malawi, Malaysia, the Marshall Islands, Nepal, Nigeria, Niue (NZ), Oman, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, the Solomon Islands, Sudan, Swaziland, Tanzania, Trinidad and Tobago, Turks and Caicos Islands, Uganda, Yemen, Yugoslavia (Serbia-Montenegro), Zambia, and Zimbabwe (International IDEA 2005).

Another reason why some people support the plurality system is because of its ability to promote stability within the government. There are traditionally fewer government turnovers in SMP systems than in plurality systems. Since 1867 Canada has elected 29 majority governments each of which have had an average lifespan of 4.1 years and 10 minority governments that have lasted about 1.4 years each (Elections Canada 2007). British governments tend to enjoy parliamentary majorities and coalition governments are few and far between. The voters in each country know that it is the party who receives the most seats that will lead the next government.

The physical appearance of SMP ballots is different from one nation to the next, but the ballot structure is traditionally categorical. Voters are given an either/or choice between a set of candidates and then they select the candidate that they wish to have represent them. This can be done by having voters check a box, mark an *X* by a candidate's name, fill in circles, or completing a set of arrows. The voter is often only able to declare preference for a single candidate; votes for more than one candidate in a single seat office will make the ballot or that particular office void or spoiled. However, in some cases more than one candidate is elected in an area for a particular position. In such cases, it is more accurate to suggest that each voter gets *N* votes wherever there are *N* people to be elected. Regardless, voters are never allowed to vote for the same candidate more than one time per office, there is no pooling of votes. This leads to a discussion of yet another positive characteristic of the SMP system, its simplicity.

By only requiring the electorate to make a selection of one candidate, a voter is not required to be knowledgeable about all competitors. If a voter prefers a particular party, he or she can scan the ballot and select only those running under the preferred

party banner. The example ballot from Belize (Fig 3.2) shows the straightforwardness of the voting process. SMP also offers simplicity for the voters because they are aware that the candidate who receives the most votes (regardless of the total proportion of the votes in the district) will win the seat.

TOWN COUNCILS ACT, 1999  
NO. 29 OF 1999  
(REGISTRATION OF ELECTORS AND ELECTIONS) REGULATIONS 1999  
FORM NO. 13

**SAMPLE**      **BALLOT PAPER**  
(SAN PEDRO TOWN COUNCIL)  
ELECTION OF ONE MAYOR  
AND  
SIX COUNCILLORS

| <i>Surname</i> | <i>Other Names</i>      | <i>Address</i>        | <i>Office Sought</i> | <i>Colour</i> |
|----------------|-------------------------|-----------------------|----------------------|---------------|
| NUÑEZ          | Alberto "Beto"          | Pescador Drive        | Mayor                |               |
| ACOSTA         | Santos "Santiago"       | Seagrape Drive        | Councillor           |               |
| ARCEO          | Omar                    | Coconut Drive         | Councillor           |               |
| GRANIEL        | Baldemar                | Angel Coral Street    | Councillor           |               |
| PEREZ          | Domingo "Popular"       | Angel Coral Street    | Councillor           |               |
| SPAIN          | Murlene "Mel"           | San Juan Area         | Councillor           |               |
| VASQUEZ        | Valeriano Pedro "Jimbo" | San Pablo             | Councillor           |               |
| HEREDIA        | Manuel                  | Tarpoon Street        | Mayor                |               |
| ARANA          | Justin Julio            | San Pedrito Area      | Councillor           |               |
| GOMEZ          | Nesto                   | Coconut Drive         | Councillor           |               |
| GUERRERO       | Lucia Gloria            | 17 Angel Coral Street | Councillor           |               |
| GUERRERO       | Justiano "Nano"         | Barrier Reef Drive    | Councillor           |               |
| GUERRERO       | Severo                  | Nurse Shark Street    | Councillor           |               |
| NUNEZ          | Genaro Alfonso          | Pescador Drive        | Councillor           |               |

*N.B.* (1) Mark a cross on the right-hand side of the ballot paper opposite the name of each candidate for whom you wish to vote.  
(2) Do not vote for more than one (1) Mayor and (6) six councillors.  
(3) When you have marked your vote fold up your ballot paper so as to conceal your vote, but so as to show the official mark on the back, show the presiding officer the official mark, then put your ballot paper in the ballot box and leave the room.

Fig. 3.2) A Sample Ballot from Belize  
Source: Belize Elections & Boundaries Department

The total number of candidates to be elected in each nation varies from one country to the next. Canada is divided into 308 electoral districts, whereas the United Kingdom has twice that many and is divided into 625 districts (Elections Canada 2007, Siaroff 2000). In the United Kingdom a member of parliament does not need to live in the district from which he or she is elected, he or she must simply win the plurality of the district's vote. Regardless of the physical number of people elected, the common characteristic is that all constituencies vote for only one candidate to represent them in the legislature.

Single member plurality and other non-proportional electoral systems are often associated with a two-party system. In the United States this is easily demonstrated by the predominance of the Republican and Democratic Parties with a lack of major third parties. In the United Kingdom the Labour and Conservative Parties express this trait<sup>5</sup>. This phenomenon is closely associated with Maurice Duverger who proposed what is now known as Duverger's Law (1954). It states that a single member plurality system will more often lead to a two-party system whereas proportional systems will lead to a multi-party system. In other words, the number of viable parties in a region will be equal to one more than the number of candidates elected to represent that region, or one more than the district magnitude.

### *3.2.1 The Greens of the United States*

Both the upper and lower chambers of the United States national government are elected by the first-past-the-post (FPTP) or single member plurality (SMP) system. To

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<sup>5</sup> However Duverger's law does not hold true in all circumstances as Richard Katz is quick to point out (Katz 1997). Canada and India both have SMP systems, yet they are able to combine SMP successfully with multi-party systems (Katz 1997).

win a seat the candidate must win a plurality of the votes cast in a district. There is a categorical ballot structure where voters can choose only one candidate per office (though occasionally exceptions are made where voters can choose multiple candidates for particular offices). The upper chamber of the Congress is known as the Senate and the 100 members are elected every six years on a rotating pattern. The lower chamber, the House of Representatives, contains 435 members, each of whom serves a two-year term.

Although the Democratic and Republican parties traditionally dominate the chamber, one of the newly emerging parties within the United States is the Green Party. Technically a federation of state Green Parties, this group is dedicated to “environmentalism, non-violence, social justice, and grassroots organizing” (Green Party of the United States 2004). The Association of State Green Parties existed from 1996 to 2001 and was reorganized in 2001 to its present structure. The strongest support for the party has been in the West Coast, the Northeast, and the area around the upper Great Lakes. Although never successful at gaining national representation, the Greens have had many successes at the state and local level. There are currently 220 Greens serving in various positions throughout 28 cities and Washington DC, even though none have ever served in the US Congress. In 1996, 2000, and 2004 the Green Party nominated presidential candidates, the most successful of whom was Ralph Nader. In his 2000 campaign for presidency Nader received 2,882,955 votes or 2.74% of the total vote share (Federal Election Commission 2001). As of 2005 there are 304,796 Greens registered nationwide which suggests that many of the votes that Nader received in 2000 were protest votes, not truly support for the Green Party (The Green Party of the United States).

Of particular difficulty to the US Green Party is gaining access to the ballot. The procedures to do so vary from state to state, but currently only 15 states grant full ballot access to the Green Party (The Green Party of the United States). Each state has its own bureaucratic hurdles that any minor party must cross to be listed on the ballot. A candidate that whose name is unable to appear on the ballot is disadvantaged and overall the restrictions prevent the party from achieving the momentum that is so vital in political campaigns. Without being on the ballot, it is difficult, if not impossible, to garner any electoral success.

One option that the United States Green Party has utilized in attempts to win election is through a process known as fusion. As shown in the ballot from New York (Figure 3.3), fusion occurs when more than one party agrees to endorse a candidate for an office and the ballot is structured such that voters can indicate the party they support (Lawson 1997). In other words, fusion allows the same candidates to run under more than one party label. In this example, Bush and Cheney are listed under the Republican and Conservative party labels, Kerry and Edwards under the Democratic and Working Family parties, and Nader and Camejo are listed as both Independents and as members of the Peace and Justice Party.

Fusion is a valid option for third parties who cannot win elections on their own yet want to become better established and gain credibility. When the votes are tallied, one can easily determine how much of a candidate's support is based upon the party. Currently fusion is allowed in sixteen states, but it is most prominent in Connecticut and New York (Winger 1997). The Twin Cities New Party of Minnesota has argued that fusion is "the *only* way for a minor party to be both principled and relevant" (Lowi 1996).

Although fusion has worked relatively well in New York, allowing the state to have major party dominance alongside strong third parties, this option is not embraced by many members of the US Green Party. Greens are afraid that fusion would dilute their message and bewilder voters, lending credence to the expression “fusion is confusion” (Jan 1997). Instead Greens prefer to pursue electoral reform in favor of proportional representation or the transferable vote. Whether or not proportional representation systems would help is yet to be determined.

| PRESIDENTIAL ELECTORS FOR<br>PRESIDENT AND VICE-PRESIDENT<br>(Vote ONCE)   | UNITED STATES<br>SENATOR<br>(Vote for ONE)   | Representative<br>In Congress<br>(20th District)<br>(Vote for ONE)   |  |  |  |  |
|--|--|--|--|--|--|--|
| <input type="checkbox"/><br> ELECTORS FOR<br><b>George W. Bush</b><br>FOR PRESIDENT<br><b>Dick Cheney</b><br>FOR VICE-PRESIDENT<br>1A<br>Republican               | <input type="checkbox"/><br> ELECTORS FOR<br><b>Howard Mills</b><br>Republican<br>2A<br>Republican                    | <input type="checkbox"/><br> ELECTORS FOR<br><b>John E. Sweeney</b><br>Republican<br>3A<br>Republican     |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>John F. Kerry</b><br>FOR PRESIDENT<br><b>John Edwards</b><br>FOR VICE-PRESIDENT<br>1B<br>Democratic               | <input type="checkbox"/><br> ELECTORS FOR<br><b>Charles E. Schumer</b><br>Democratic<br>2B<br>Democratic              | <input type="checkbox"/><br> ELECTORS FOR<br><b>Doris F. Kelly</b><br>Democratic<br>3B<br>Democratic      |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>Ralph Nader</b><br>FOR PRESIDENT<br><b>Peter Miguel Camejo</b><br>FOR VICE-PRESIDENT<br>1C<br>Independence        | <input type="checkbox"/><br> ELECTORS FOR<br><b>Charles E. Schumer</b><br>Independence<br>2C<br>Independence          | <input type="checkbox"/><br> ELECTORS FOR<br><b>John E. Sweeney</b><br>Independence<br>3C<br>Independence |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>George W. Bush</b><br>FOR PRESIDENT<br><b>Dick Cheney</b><br>FOR VICE-PRESIDENT<br>1D<br>Conservative             | <input type="checkbox"/><br> ELECTORS FOR<br><b>Marilyn F. O'Grady</b><br>Conservative<br>2D<br>Conservative          | <input type="checkbox"/><br> ELECTORS FOR<br><b>John E. Sweeney</b><br>Conservative<br>3D<br>Conservative |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>John F. Kerry</b><br>FOR PRESIDENT<br><b>John Edwards</b><br>FOR VICE-PRESIDENT<br>1E<br>Working Families        | <input type="checkbox"/><br> ELECTORS FOR<br><b>Charles E. Schumer</b><br>Working Families<br>2E<br>Working Families |  |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>Ralph Nader</b><br>FOR PRESIDENT<br><b>Peter Miguel Camejo</b><br>FOR VICE-PRESIDENT<br>1F<br>Peace And Justice | <input type="checkbox"/><br> ELECTORS FOR<br><b>Abraham Hirschfeld</b><br>Builders<br>2F<br>Builders                | <input type="checkbox"/><br> ELECTORS FOR<br><b>Morris N. Guller</b><br>Centrist<br>3F<br>Centrist      |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>Roger Calero</b><br>FOR PRESIDENT<br><b>Arrin Hawkins</b><br>FOR VICE-PRESIDENT<br>1G<br>Socialist Workers      | <input type="checkbox"/><br> ELECTORS FOR<br><b>Martin Koppel</b><br>Socialist Workers<br>2G<br>Socialist Workers   |  |  |  |  |  |
| <input type="checkbox"/><br> ELECTORS FOR<br><b>Michael Badnarik</b><br>FOR PRESIDENT<br><b>Richard V. Campagna</b><br>FOR VICE-PRESIDENT<br>1H<br>Libertarian  | <input type="checkbox"/><br> ELECTORS FOR<br><b>Donald Silberger</b><br>Libertarian<br>2H<br>Libertarian            |  |  |  |  |  |
|  | <input type="checkbox"/><br> ELECTORS FOR<br><b>David E. McReynolds</b><br>Green<br>2I<br>Green                     |  |  |  |  |  |

Fig 3.3) A Sample Ballot from New York which Demonstrates Fusion  
 Source: Fay 2007

### 3.2.2 The Canadian Greens

The vast nation of Canada is divided into 308 electoral districts each of which elects a Member of Parliament in a single member plurality system. Although similar to the United States presidential system, Canada offers a look at how SMP systems can operate when used in a parliamentary system. Elections occur in the US every two, four, or six years depending on the office. In Canada, upon the request of the Prime Minister, the Parliament is dissolved and an election date is set (Elections Canada 2007). Voters are able to vote in advance polls (up to three days before the election), on Election Day itself, or by mailing a special ballot marked with their preference (Elections Canada 2007). At the polling place, after being identified as a registered voter, the voter receives a ballot which lists the candidate's names in alphabetical order along with their party affiliation (Elections Canada 2007). The voter steps behind a screen and marks a circle placed next to the name of their preference.

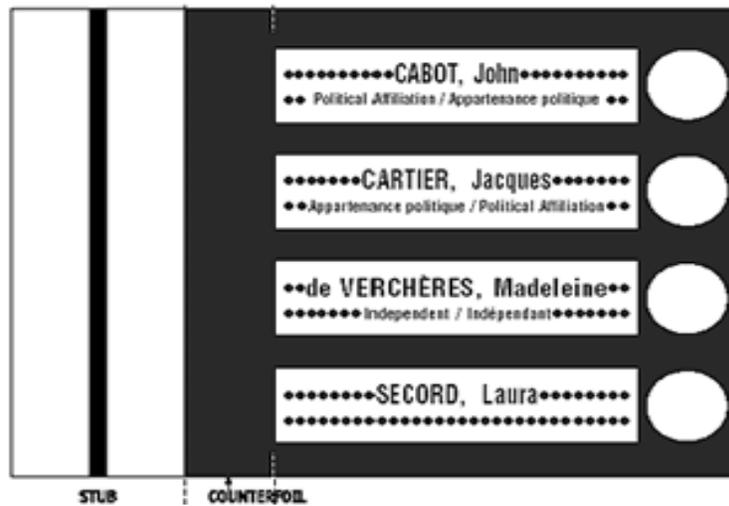


Fig 3.4) A Sample Canadian Ballot  
Source: Elections Canada 2007

The Canadian Greens, known as the Green Party of Canada, are currently led by Elizabeth May (Green Party of Canada 2007). Originating in 1988, the Green Party has

spent three decades trying to institute the values of ecological wisdom, social justice, participatory democracy, non-violence, sustainability, and respect for diversity, as expressed in the global green charter. The Canadian Greens have a federal council that includes thirteen provincial and territorial representatives, a leader, two deputy leaders, a party chairperson and nine councilors at large (Green Party of Canada 2007). The Canadian Greens also have a shadow cabinet that offers political alternative to the government's cabinet and allows the Greens to voice their opposition on various policy issues (Green Party of Canada 2007).

The offshoot of the Green Party of Canada is known as the YGC or the Young Greens of Canada. This organization was started in 2006 and harnesses onto the energetic youth of Canada who are concerned about the future and consider themselves members of the 'Generation Green' (Generation Green). Although not a traditional political party, the YGC offers an outlet for people between the ages of 14-29 to voice their opinions about policy issues. As YCG member Jiselle Bakker noted, "The so-called apathy of our generation is simply the old parties' excuse for their inability to deal with the important issues of our day" (Generation Green). It is too soon to tell, but based upon a reaction like Bakker's, the creation of the YGC could lead to an increase in membership, votes, and overall support for the Green Party of Canada.

### *3.3 The Block Vote*

The block vote, common in the Middle East as well as parts of Asia and Oceania, is very similar to the SMP<sup>6</sup>. The major difference between these two electoral systems is

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<sup>6</sup> Nations that use the block vote are: The Cayman Islands, the Falkland Islands, Guernsey (UK), the Isle of Man (UK), Jersey (UK), Kuwait, Laos, Lebanon, Maldives, Mauritius, Saint Helena, Syria, Tonga, and Tuvalu (International IDEA 2005).

that SMP only allows for one candidate to be elected per district whereas block voting is applied to multi-seat districts (Reilly and Reynolds 1999). Therefore voters can cast as many votes as there are seats to be filled and the winners are those who receive the highest number of votes cast. This leads to a greater distortion than SMP because one party tends to win representation of an entire constituency (Lakeman 1974). The distortion is attributed to the fact that in block vote systems the party is the primary factor that aids in determining vote choice, not the personal attributes of the candidate. Voters are able to vote for whichever party and individual candidates they wish without fear of 'wasting a vote' as often occurs in SMP systems.

### *3.3.1 Greens of Lebanon – The Block Vote*

In Lebanon parliamentary elections are held every four years. The Parliament (the Chamber of Deputies) elects a President for a six-year single term and together they choose the Prime Minister (Country Studies US 2007). The *Majlis al-Nuwab* or the National Assembly has 128 seats and each member serves for four years (CIA 2007). The seats are allocated by religious affiliation (sectarian proportional representation) with approximately half of the seats going to Christians and half to Muslims. Lebanon requires that Members of Parliament (MPs) receive a plurality of the vote in a constituency by gaining support from members of their own faith and from outside of their faith.

Lebanon lacks modern political parties; instead it has a number of loosely formed political coalitions. Lebanese parties are difficult to study as they are fragmented into small sectarian subcultures that attempt to mobilize subgroups of the population (AbuKhalil 1994). These coalitions can loosely be described in terms of their political

affiliation. The Shi'a vote is traditionally split between the Amal and Hizballah groups while the National Bloc, National Liberal Party, the Lebanese Forces, and others are popular with Christians (AbuKhalil 1994). The Lebanese Sunnis usually vote in favor of the Tawhid and Future Movement among others (AbuKhalil 1994).

Lebanon does not have any form of a Green Party. Though, with time, a Green Party could organize and form. If one does not, this could be because Greens inherently lack a religious basis and therefore would not appeal to any one sect of Lebanese people. Another possible reason why a Green Party might be unlikely to form is that of the fourteen nations which use the block vote electoral system to elect members to their legislature, only one, Mauritius, has a Green Party.

### *3.4 The Party Block Vote*

The Party Block Vote is also used in systems with multi-member districts. Voters are required to choose between pre-established party lists of candidates, not individuals. The party that garners the most votes wins all of the seats in the district thereby electing the established list of candidates (Reilly and Reynolds 1999). Even though each elector casts a single vote, he or she is effectively voting for all members on that list. This system can lead to a more balanced representation of the entire electorate if the party list provided is ethnically or racially diverse. Currently there are only four nations that use this particular sub-family of electoral system: Cameroon, Chad, Djibouti, and Singapore (International IDEA 2005).

The party block vote, like SMP is easy to use and to understand. There is no requirement that any particular percentage must be reached, so voting is a simple process of awarding seats to the party with the most votes. Because the parties draw up their list

of candidates beforehand, party block vote practically guarantees minority representation. In one list, a party wants to appeal all genders, all races, all ethnicities, and all religions, hence why the party lists are often so balanced.

#### 3.4.1 *The Greens of Cameroon*

Cameroon has a unicameral *Assemblée Nationale* (National Assembly) with 180 seats. These members all serve five-year terms unless the President adjusts the length of the legislature (International Foundation for Election Systems). The head of state is the President who serves a 7-year term and the official head of government is the Prime Minister (Mehler 1999). Originally after gaining independence Cameroon employed a plurality system but since 1997 they have allowed winners who get a majority of the votes in a multi-member district to receive all the seats in that district (Mehler 1999).

The Green Party of Cameroon is officially named “Defence of the Cameroon Environment” (DEC) which allows us a glimpse of how African Green Parties operate (Global Greens 2001a). DEC acknowledges the environmental sacrifices that were made in attempts to modernize Africa since the 1960s and hopes to prevent further environmental degradation (Global Greens 2001a). Yet, since the 1992 Rio Summit<sup>7</sup> there has been an increase in the number of Green Parties across the continent of Africa, many of whom are raising their voices in opposition to the toxic wastes, deforestation,

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<sup>7</sup> Informally known as the Earth Summit, the United Nations Conference on Environment and Development (UNCED) was hosted by Rio de Janeiro from 3-14 June 1992. There were 172 governing nations present at this conference along with 2,400 people representing non-governmental organizations. The major accomplishments of this meeting include Agenda 21, the Rio Declaration on Environment and Development, the UN Framework Convention on Climate Change, and the UN Convention on Biological Diversity (United Nations 2007).

desertification and other environmental mismanagement that is taking place in their nations (Global Greens 2001a).

As various independent national green parties found themselves struggling with financial needs and dictatorships, eleven African Green Parties met in Nigeria in 1994 and formed the African Greens Committee (Global Greens 2001a). After four years, the Committee was re-created as the African Federation and met with the European Greens forming a partnership. The DEC is optimistic about the future stating:

Despite the difficulties currently faced by green parties in Africa, there is no cause for concern, as the dictatorships' chains are already rusting and will surely break. We know well that current African democracies are only a façade but they will evolve in the right direction... (Global Greens 2001a).

The DEC looks to a green presidential candidate in Burkina-Faso who received 7% of the vote in 1998 and the fact that the Greens in Guinea-Bissau<sup>8</sup> have been part of the governing coalition (Global Greens 2001a). In their own words, “These examples are perhaps already a sign that the African Greens will mature and their ‘Spring’ will come in the first two decades of the 3rd millennium, if democracy truly comes to the continent” (Global Greens 2001a).

### *3.5 Conclusion of Plurality Effects*

Plurality systems are praised for their stability, simplicity, and their unity to the proofs of social choice. Furthermore these systems offer voters the chance to have constituency representatives that can be held directly accountable for their actions. To some, this compensates for the reality that plurality systems are frequently the most disproportional systems and smaller parties are systematically underrepresented. As

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<sup>8</sup> Guinean League for Ecological Protection or LIPE

mentioned, all of the factors that define electoral systems (district magnitude, electoral formula, and ballot structure) have a decisive impact on the emergence and the existence of smaller parties. As Farrell unfortunately states, “The benefit of simplicity can be (and is often) at the cost of fairness – fairness to smaller parties and to the supporters of smaller parties, fairness to those voters ‘trapped’ in seats which are safely held by parties they do not support” (Farrell 2001, 29). In as much as plurality systems have their supporters, no system is perfect. In order to better weigh the pros and cons of these electoral formulae, we need to analyze other systems and make a better-informed comparison. The following chapter will look at the branch most closely related to plurality systems, the majoritarian electoral systems.

## Chapter 4: The Majoritarian Electoral Systems

- 4.1 Overview of the Majority System
- 4.2 Alternative Vote
  - 4.2.1 The Greens Down Under – Australia’s Green Party
- 4.3 Two-Round System
  - 4.3.1 Les Verts – The French Greens
- 4.4 Conclusion of Majority Effects

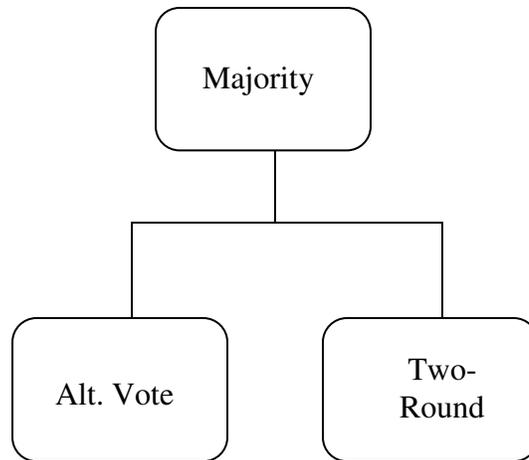


Fig 4.1) The Majority Branch of the Electoral System Family Tree

### 4.1 Overview of the Majority System

If the plurality system is praised for its simplicity, the majority system also deserves some credit. Similar to the plurality system, majoritarian electoral systems have a district magnitude of one and meet the qualifications of the social choice test. The ballot structure is often the same as in SMP with only a few differences. The major distinction between the plurality electoral system and the majoritarian system lies within the electoral formula. Instead of allocating a seat to whomever receives a mere plurality of votes cast, this electoral system mandates that a victorious candidate must accrue a majority of the votes cast. Therefore a candidate must receive at least 50% of the vote plus one to win a seat in the legislature. This system offers a compromise between those who seek stability and simplicity and those who want to improve upon basic plurality.

#### 4.2 *Alternative Vote*

There are two major types of majoritarian systems, the alternative vote and what is known as the two-round system. In the alternative vote system, also known as the preferential voting system, the voter rank orders all candidates. On the ballot the voter determines his or her favorite (designated by writing a 1), then choose how he or she would vote if the preferred candidate were not elected (designated by 2), and so forth (3+) until the entire candidate list is exhausted. Therefore the ballot structure is ordinal, a stark difference from the SMP categorical ballot. When counting votes, the ballots are first divided into first choice candidates. If there is a clear majority winner, than the seat in question is allocated. If no single candidate has reached a majority traditionally it is the candidate who received the least votes that is eliminated and the second rank votes are then distributed to the other candidates. This process is repeated until one candidate receives a majority of the votes cast.

| <b>Candidate</b> | <b>Party</b> | <b>Vote (Round 1)</b> | <b>Vote (Round 2)</b> | <b>Vote (Round 3)</b> |
|------------------|--------------|-----------------------|-----------------------|-----------------------|
| Doan             | A            | 127                   | ---                   | ---                   |
| Francisco        | B            | 329                   | 331                   | 603                   |
| Josslyn          | C            | 343                   | 345                   | 397                   |
| Kennedy          | D            | 201                   | 324                   | ---                   |

Fig 4.2) Example Alternative Vote Count

In this example there were 1000 valid votes cast for four potential candidates (Doan, Francisco, Josslyn, and Kennedy). In a simple plurality system Josslyn would win as he received more votes than any other candidate. Yet for the alternative vote

system a candidate must receive a majority (50% plus 1) of the votes cast, in this case 501. After the first round of voting there is no clear winner therefore Doan, having received the fewest votes is eliminated and her second rank votes are then redistributed. Following the distribution it is apparent that almost all supporters of Doan prefer Kennedy as a second choice. Since there is still no majority winner, although the field looks much more even now, the new lowest candidate (Kennedy) is removed and again those votes are redistributed. As there are only two candidates remaining at this point, one must win a majority. 52 of Kennedy's votes were transferred to Josslyn bringing him to 397 votes total and 272 were transferred to Francisco bringing him to 603 and a solid victory.

This system was invented by a professor at the Massachusetts Institute of Technology in the 1870s but has spread far beyond the United States (Farrell 2001). Alternative vote is used primarily in Australia (See Fig 4.3) and Nauru although it has been employed historically in Canada, Papua New Guinea, Sri Lanka, and the state of Alabama (Farrell 2001). The alternative vote offers numerous advantages to the nations that use it. Since it is advantageous to be ranked second or third, in the alternative vote system, a candidate must make broad appeals to the electorate in hopes of being ranked highly on the ballot. As experience has shown, the 'second preference' votes do add up and can help a candidate win election. It is difficult to ignore large sections of the electorate or to hold extreme issue positions when one wants to get all the support, and high ranks, one can muster. Also, like all majoritarian systems, alternative vote can increase the perceived legitimacy of a candidate because unlike in plurality systems, a victorious candidate in a majoritarian system receives more than half of the votes cast.

However, this electoral system also requires that the voter be able to effectively rank all of the possible candidates instead of simply selecting the one that they most prefer. This can lead to debate of how informed voters actually are in an alternative vote system. Some feel that after ranking the first one or two preferences, voters may simply rank the remainder of the candidates from the top to the bottom (or vice versa) on the list, implying that position on the ballot is important. As a result of these accusations, some ballots are actually printed in a revolving manner where a proportion of the ballots printed have each candidate listed first.

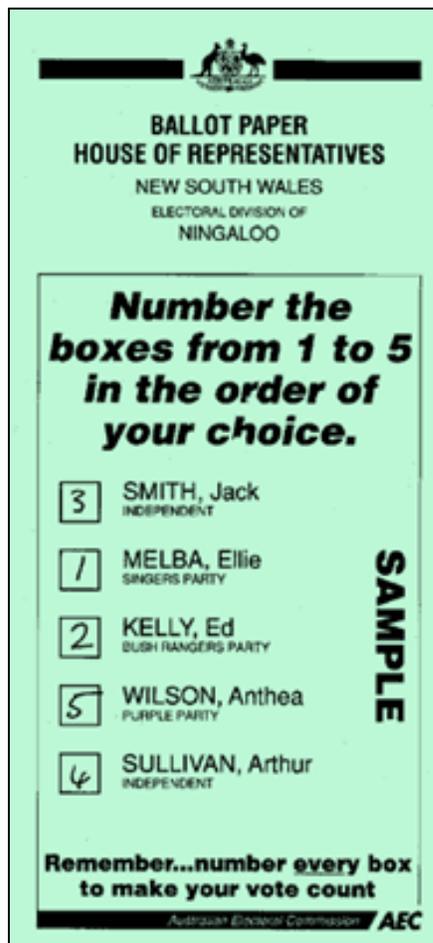


Fig 4.3) A Sample Ballot for the Australian House of Representatives  
Source: The Australian Electoral Commission 2007

#### 4.2.1 *The Greens Down Under – Australia’s Green Party*

In 1901 Australia established a federal system of government that divides power between the Commonwealth (the national government) and six States. The Commonwealth Parliament is made up of a Senate and a House of Representatives, which house 76 and 150 members respectively (australianpolitics.com 2007). Australia’s party system tends to be dominated by the Australian Labor Party and two coalition parties: the Liberal Party of Australia and the National Party of Australia. Historically, minor parties have not survived for long although the Australian Democrats have survived for over thirty years (australianpolitics.com 2007).

Along with only a few other countries in the world, Australians use the alternative vote electoral system in their lower house. In Australia voters have to rank *all* candidates or else the ballot can be declared invalid (Farrell 2001). Under this system a candidate must receive an overall majority of the votes in a constituency. If this cannot be accomplished with the first preference of each vote, then a second round is needed. As mentioned, at this point the candidate who received the fewest “first rank” votes is removed from the list and his or her votes are then divided by the “second rank” votes.

The Australian Greens can trace their origin to the United Tasmania Group, which formed in 1972 as a campaign to save Lake Pedder. Although they were unable to win any seats in that election, they persevered. Throughout the 1980s the Australian Greens continued to grow and in 1984 Green Parties were formed in Queensland and New South Wales. In the 1990s there were efforts to create a national Green Party and on August 30, 1992, the Australian Greens were officially recognized as a political party (australianpolitics.com 2007). Although experiencing only moderate electoral success at

the national level (only 4 members in 2004), thirteen have been elected at the state level and more than 80 Australian Greens have been elected locally (Australian Greens 2007).

The Greens have four pillars that they stand for: economic justice and social equality, grassroots democracy, peace and non-violence, and ecological sustainability.

Stereotypically only associated with the last pillar, in recent years the Australian Greens have become very outspoken against war suggesting that peace and non-violence is as important as any other pillar (Turnbull and Vromen 2004).

Like many other Green Parties, the main support for the Australian Greens comes from younger voters who are professional rather than working class and live in more urban areas (Turnbull and Vromen 2004). Turnbull and Vromen (2004) delve into an analysis of who the Greens of Australia are with their use of the Australian Survey of Social Attitudes (AuSSA). They note that although the majority of the supporters are young, this is because they draw a larger proportion of young voters than do any other party. There is more support in the age group 35-49 (38%) than 18-34 (30%) implying that Greens are not just a passing fad for young inexperienced voters (Turnbull and Vromen 2004). Furthermore, the Greens appear to be concentrated in major cities and the outlying areas (67%), which is essential for future success as the nation becomes more urbanized (Turnbull and Vromen 2004). However, of the AuSSA respondents that were registered with a party affiliation only 6% said they were registered Greens (Turnbull and Vromen 2004).

#### 4.3 *Two-Round System*

The two-round system is also known as the second ballot system, the two-ballot system, and the run-off. As implied by the name, voting takes place in two rounds

requiring voters to vote on more than one occasion per election. This system is most closely associated with France although it is currently in use by 22 nations<sup>9</sup> many of whom have ties with France either as “territorial dependencies on the French Republic, or have been historically influenced in some way by the French” (Reynolds and Reilly 1997, 43).

The first round of voting is similar to the first past the post voting method. If a candidate receives a majority of the votes then he or she wins and there is no need to conduct a second round of voting. However, this is rarely the case and a second round of votes is conducted a week or a fortnight later (Reilly and Reynolds 1999). The two candidates receiving the highest scores are kept on the ballot and a second round of voting leads to a majoritarian winner.

| <b>Candidate</b> | <b>1<sup>st</sup> Round</b> | <b>2<sup>nd</sup> Round</b> |
|------------------|-----------------------------|-----------------------------|
| Cigler           | 253                         | 514                         |
| Loomis           | 327                         | 486                         |
| Herron           | 186                         | ---                         |
| Kaarbo           | 234                         | ---                         |

Fig 4.4) Example Two-Round Voting

Once again, for this example there are four candidates. After the first round of voting, candidates Herron and Kaarbo are removed from the ballot and seven to fourteen days later the voters are asked to choose between Cigler and Loomis. Cigler’s vote increased by 261, that much is apparent. Unfortunately with a two round voting system it

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<sup>9</sup> Nations using the two round majoritarian system include Bahrain, Belarus, Central African Republic, Comoros Islands, Cuba, Egypt, France, Gabon, Haiti, Iran, Kiribati, Kyrgyzstan, Mali, Mauritania, Mongolia, Montserrat, Republic of Congo, Togo, Turkmenistan, Uzbekistan, and Vietnam (International IDEA 2005).

is impossible to link votes from one round to the next. He could have lost original supporters to Loomis yet gained all of Herron and Kaarbo's voters, or he could have maintained support and only gained some of the new votes.

In the alternative system, scholars can determine the preference order of every voter because it is all on one ballot. In two-round systems, it is impossible to determine exactly. Another disadvantage of this system is that voters can drop out of the election casting votes for the first round, but not the second. Yet, there are supporters of the two round system, and justifiably so. Changes can occur on the political landscape that would make voters prefer one candidate the first round and then support a different candidate the second round (ACE Electoral Knowledge Network 2006). Furthermore it does not require the widespread knowledge of all candidates that is required by the alternative vote.

This system encourages multi-party competition because the first round provides an opportunity for smaller parties to have their voice heard. There is nothing to lose by being on the first ballot, and if the threshold can be crossed and a party is ensured a spot on the second ballot, there is certainly much to gain. Furthermore this system encourages the formation of party alliances. Known as *apparentement*, allied parties sometimes choose to forfeit their spot on the second ballot in hopes that their supporters will rally around their ally (Georgel 1979).

#### 4.3.1 *Les Verts – The French Greens*

In June of 1958 the nation of France found its political system collapsing (Elgie 2005). When General Charles de Gaulle came to power, constitutional reform, including electoral reform, was inevitable. France quickly re-introduced the majoritarian system

that was used during the Third Republic, abandoning the Fourth Republic's use of PR. With one exception, under the French Fifth Republic, all 577 members of the lower house, the *Assemblée Nationale* or National Assembly, are elected in a single-member constituency two-round ballot (Elgie 2005). If a candidate wins on the first round of balloting, he or she is immediately elected. If not, there is a second ballot cast a week later in which a candidate only needs a plurality to win (Siaroff 2000). The only candidates that advance to the second round are those that have received at least 12.5 percent of the constituency's electorate vote, thus eliminating many smaller candidates and parties (Siaroff 2000). Thus, the first ballot serves a role similar to that of the primary ballot and the second ballot can easily be compared to the general election.

Tracing their roots back to 1982, the Greens are a traditional left of center group. 1988 was the first time a Green candidate ran for the presidency and Antoine Waechter received 3.8% of the vote that year. However, the true emergence of the Greens was in the 1989 parliamentary elections when the Greens captured 10.6% of the vote. This number has remained fairly constant with *Les Verts* receiving 8.43% of the vote in 2004, granting them six seats. In the 2007 parliamentary elections *Les Verts* was awarded four seats based on its performance in the second round (French Ministère de l'Intérieur 2007b). Of the 36,719,396 votes that were cast in the 2007 presidential election, Dominique Voynet of *Les Verts* received 576,666 or 1.57% of the total vote (French Ministère de l'Intérieur 2007a).

#### *4.4 Conclusion of Majority Effects*

Like the plurality systems, majoritarian systems are recognized as promoting government stability. Also analogous to the situation produced by plurality systems, in

majority systems smaller parties are disadvantaged and the results are somewhat disproportional. Yet this system can produce quite different results than plurality and is considered to be a solution to the problem of vote splitting between similarly-minded parties. Another crucial distinction between these two electoral system families is that the majoritarian system offers a solution to the problem of a candidate representing a constituency in which a majority of voters did not support him.

Majoritarian systems make it harder for the far left and right ends of the political spectrum to be represented. The two-round ballot effectively eliminates extremist parties and brings candidates and voters closer to center in the second round (Farrell 2001). Alternative voting also forces the candidates towards the center. In Australia the major parties are inclined to bargain with minor parties to gain the second preferences of their supporters, a process known as “preference swapping” (ACE Electoral Knowledge Network 2006). This leads to a form of cooperative behavior that is unlikely to be seen in plurality systems.

## Chapter 5: Proportional Representation

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- 5.2 Single Transferable Vote
  - 5.2.1 Irish Greens - Comhaontas Glas
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  - 5.4.1 New Zealand Greens
  - 5.4.2 German Greens
- 5.5 Conclusion of Proportional Representation

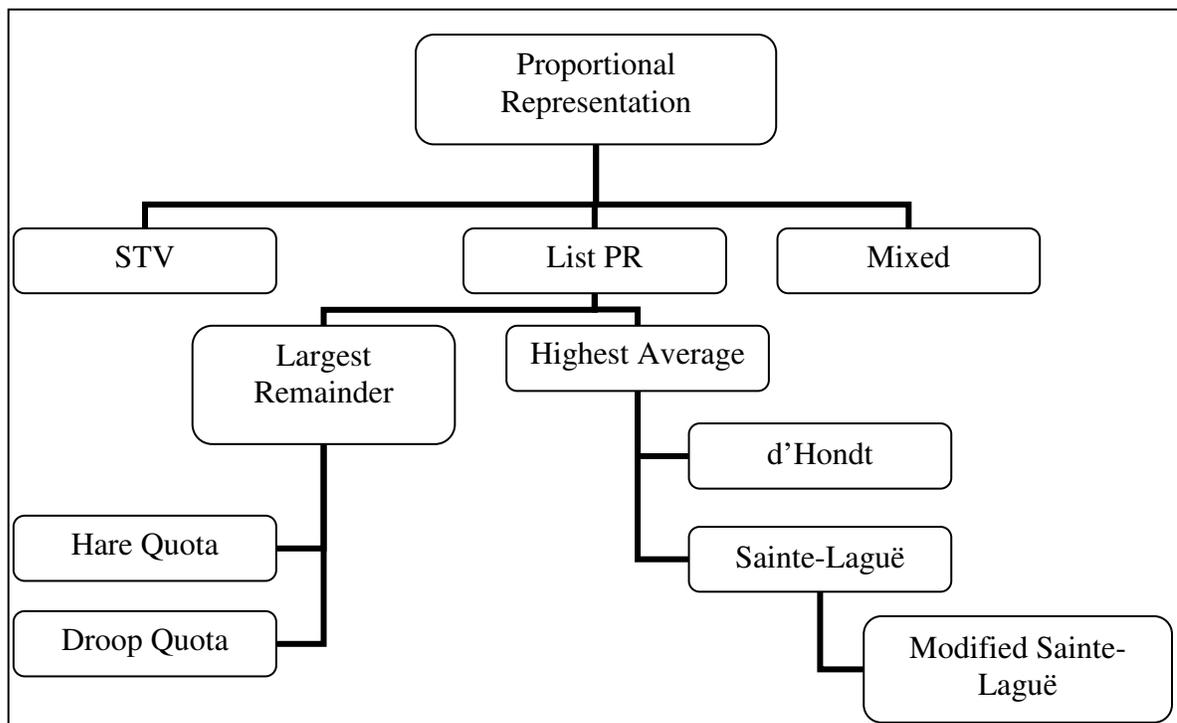


Fig 5.1) The Proportional Representation Branch of the Electoral System Family Tree

### *5.1 Overview of Proportional Representation*

So far the discussion has focused around candidate-based voting. Proportional representation systems are party-based voting. The basic idea of proportional representation (PR) systems is that the number of votes cast for a party should be reflected in their relative strength in the legislature. The means of doing so show considerable variation, but are traditionally thought of in three major methods of seat allocation: single transferable vote, party lists, and mixed systems.

### *5.2 Single Transferable Vote*

The single transferable vote method operates differently in different nations (Bowler and Grofman 2000). At its most basic form, the single transferable vote (STV) system allows voters to rank their preferences ordinally and the seats are then allocated by a quota system. After all the votes are divided by first preference, the quota is determined by dividing the number of first preference votes by the number of seats in the district plus one<sup>10</sup>. This quota is purely an abstract number and can change if electoral reform occurs.

Any candidate whose vote total exceeds the quota will gain a seat. Votes that exceed the required amount are then reallocated to other candidates based upon the secondary preferences. If seats remain and no party or candidate exceeds the quota, the weakest party or candidate is eliminated and the second preferences on those ballots are transferred to those remaining. Although appearing similar to the alternative vote (as

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<sup>10</sup> Further discussion on how this quota is determined is found in section 5.2.1.

found in Australia), the difference is significant. The alternative vote system occurs in single-member districts while the single transferable vote is for multi-member districts.

By giving voters the opportunity to rank order candidates, STV gives voters a chance to split their ballot in ways that signal preference to particular parties but also support for other candidates (Bowler and Grofman 2000). As such, this system increases the chance for strategic voting and freedom of choice. With the exception of Denmark (briefly), STV is found only in nations formerly under the British rule (Bogdanor 1984).

### *5.2.1 Irish Greens - Comhaontas Glas*

Malta and the Republic of Ireland are the only nations that currently use the STV system<sup>11</sup>, but for brevity's sake, only the latter will be discussed. Within the Republic of Ireland there are three major political parties: Fianna Fáil, Fine Gael, and Labour (Bogdanor 1984). Fianna Fáil traces its roots back to the 1921 decision over whether or not to accept the Treaty of Britain, and after rejecting the newly formed government, they became the party of the Irish nationalists (Siaroff 2000). Fine Gael tends to be less socially conservative, but differs from Fianna Fáil as a matter of tradition more so than anything else (Bogdanor 1984). The Labour Party has been rather weak when compared to Fianna Fáil and Fine Gael, partially because Ireland does not have the demographics necessary to support the policies Labour parties often advocate (Siaroff 2000).

In Ireland there are 41 constituencies which are three, four, or five-member districts (Bogdanor 1984). On the ballot voters are required to mark a first place preference in order to be declared a valid vote, however they are able to rank as many

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<sup>11</sup> Northern Ireland also uses the single transferable vote system of proportional representation. Six members are elected from each of their eighteen districts (Siaroff 2000).

preferences as they wish on the ballot. A strategic voter realizes that withholding secondary preferences gains him or her nothing and therefore will often rank all candidates (Bogdanor 1984). The fact that the voter only ranks the candidates that he or she wishes to rank, makes this system slightly different than the alternative vote used in Australia. A more critical difference is that alternative vote is used in single-member district and STV is in multi-member districts.

The quota is determined by the formula:

$$\frac{V}{S + 1} + 1$$

where  $V$  is the number of valid votes cast in an election and  $S$  is the number of seats available in the district. This formula is derived from the fact that in order to win a multimember district, one has to win less of the vote than one might think. For example, in a two-member district, although one might assume so, a victorious candidate does not actually require half of the vote. In such a district, any amount greater than one-third of the vote ensures the candidate a victory because no two other candidates can have more votes than the one that has one-third. In a three-member district, only one-fourth of the vote is required.

Comhaontas Glas has been in existence since 1981 when it was founded as the Ecology Party of Ireland (Green Party of Ireland 2007). Among the most important issues to the Green Party of Ireland are climate change, public transport, a green economy, clean politics, and a more honest tax package (Green Party of Ireland 2007). In their first election, in November of 1982, the Irish Greens received 950 votes or 1.81% of the total (Green Party of Ireland 2007). By 1987 the Greens increased their support to

1,377 votes or 2.4%, not enough to win a seat, but enough to give them hope (Green Party of Ireland 2007).

Their first seat in a general election was in 1989 when Roger Garland was awarded a seat in the *Dáil* from Dublin South (Took and Donnelly 2007). This victory was expanded in 2002 when they garnered 4% of the national vote, giving them six Members of Parliament (Took and Donnelly 2007). Although never achieving spectacular numbers in Parliament, the Irish Greens have maintained fairly consistent support.

### *5.3 Party List*

The underlying principle that unites all party list systems is that each party creates a list of their candidates for each constituency. The proportion of votes a party receives establishes the number of seats for which the party is eligible. Four people are frequently associated with the formation of PR list systems: Victor d'Hondt (Belgium), Eduard Hagenback-Bischoff (Switzerland), Thomas Hare (England), and A. Sainte-Laguë (France) (Farrell 2001). Each man played an instrumental role in the development of electoral system design during the 19<sup>th</sup> century, which in turn continues to influence the way electoral systems operate today. In list systems, voters cast support for either a party's list as a whole or for one or more candidates on a list (Gallagher and Mitchell 2005). List systems are primarily categorized by seat allocation formula between those that use division (highest average) and those that award seats by subtraction (largest remainder) (Farrell 2001).

#### *5.3.1 Largest Remainder Systems*

The largest remainder systems are based upon a quota that is determined by the number of votes cast and the number of seats to be allocated (Gallagher and Mitchell

2005). The two most commonly used quotas are the Hare and Droop quotas. Largest remainder systems are used in Austria, Belgium, Columbia, Costa Rica, and Iceland (all Hare), as well as the Czech Republic, Greece, and South Africa (all Droop).

Traditionally the voting occurs in one round and the counting process occurs in two or more. In the first round, any party that exceeds the predetermined quota is awarded a seat and the quota is subtracted from their total vote (Farrell 2001, Gallagher and Mitchell 2005). In the second round, those with the 'largest remainder' are granted the remaining seats in order from most remaining to least. Largest remainder systems favor smaller parties, especially as compared to any other system discussed so far.<sup>12</sup>

#### *5.3.1.1 The Hare Quota*

The Hare Quota or 'simple quota', first devised by Thomas Hare, is calculated as the number of seats divided by the number of votes (Gallagher and Mitchell 2005, Farrell 2001). In the hypothetical example below, there are five competing parties that have received a total of 1,000 votes and are contending for six seats. The formula is Hare Quota = votes / seats, therefore the quota is  $1000/6 = 167$  votes. The third and fifth columns show the number of seats allocated to each party and the number in parentheses shows the order in which the seats would be awarded. The first two seats are awarded to the Jayhawks and the Tigers who have each exceeded the quota. After subtracting the quota from their total votes, the residual four seats are determined by the remainder. As simple mathematics show, lower quotas lead to more seats being allocated in the first round and fewer being determined by the remainder, therefore producing somewhat less

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<sup>12</sup> This can be seen in Fig 5.2 where the Wildcats received 1/6 of the seats even though they received 1/10 of the total vote.

|           | Total Votes | Seats Allocated | 2 <sup>nd</sup> Round (Remainder) | Seats Allocated | Total Seats Allocated |
|-----------|-------------|-----------------|-----------------------------------|-----------------|-----------------------|
| Jayhawks  | <b>328</b>  | 1 (1)           | 161                               | 1 (4)           | 2                     |
| Tigers    | <b>289</b>  | 1 (2)           | 122                               | 1 (5)           | 2                     |
| Wildcats  | <b>113</b>  | 0               | 113                               | 1 (6)           | 1                     |
| Buffalos  | <b>176</b>  | 0               | 176                               | 1 (3)           | 1                     |
| Longhorns | <b>94</b>   | 0               | 94                                | 0               | 0                     |

Fig 5.2) A Hypothetical Example of a Hare Quota Allocation;  
Hare Quota = 167 Votes

proportional results (Farrell 2001).

#### 5.3.1.1.1 Columbia: *Partido Verde Oxigeno*

Columbia hosts a bicameral *Congreso* with a 114 seat *Senado* and a 199 seat *Camara de Representantes* (CIA 2007). Members of both chambers serve four-year terms and are elected by party. Columbia has two well-established parties, the Liberal Party and the Conservative Party (which later changed its name to the Social Conservative Party), which have both dominated the Colombian political scene for decades (CIA 2007). The small parties that have emerged in Columbia tend to be ideological and class-oriented (CIA 2007). One of 15 formally recognized parties is the *Partido Verde Oxigeno*, the “Green Party Oxygen” of Columbia.

Although a fairly young party, the *Partido Verde Oxigeno* has had an adventurous time. On February 23, 2002, FARC guerillas (The Revolutionary Armed Forces of Columbia) kidnapped the Green presidential candidate Ingrid Betancourt and her campaign manager Clara Rojas (Green Party of the United States). In spite of press coverage and the urgings of green parties around the world, Betancourt is still being held hostage five years later. It is difficult to determine what the impact of this kidnapping was on the Colombian Greens. It appears that they have not been dissuaded and they are continuing to carry on her work.

### 5.3.1.2 Droop Quota

An alternative largest remainder system is the Droop quota or the Hagenbach-Bischoff quota. The quota is determined by dividing the total number of votes by the number of seats plus one, and then adding one to the result (Farrell 2001). In the example below the Droop quota is

$$\frac{\text{Votes}}{(\text{Seats} + 1) + 1}$$

or in this instance  $[1,000 / (6+1)] + 1 = 144$ . The overall allocation of seats in this example is the same as in the Hare quota, but that is not always the case.<sup>13</sup>

|           | Total Votes | Seats Allocated | 2 <sup>nd</sup> Round (Remainder) | Seats Allocated | Total Seats Allocated |
|-----------|-------------|-----------------|-----------------------------------|-----------------|-----------------------|
| Jayhawks  | <b>328</b>  | 2 (1,2)         | 40                                | 0               | 2                     |
| Tigers    | <b>289</b>  | 2 (3,4)         | 1                                 | 0               | 2                     |
| Wildcats  | <b>113</b>  | 0               | 113                               | 1 (6)           | 1                     |
| Buffalos  | <b>176</b>  | 0               | 176                               | 1 (5)           | 1                     |
| Longhorns | <b>94</b>   | 0               | 94                                | 0               | 0                     |

Fig 5.3) A Hypothetical Example of a Droop Quota Allocation;  
Droop Quota = 144 Votes

#### 5.3.1.2.1 The South African Green Party

South Africa's electoral system can trace its roots to the historical institution of apartheid. Historically, South Africa had plurality rule which effectively elected a Whites-only House of Assembly from its conception until 1994 (Reynolds 2004). As noted by Shaheen Mozaffar in his study of African electoral systems, South Africa chose their electoral system in response to the political negotiations that generated violent civil conflict (Mozaffar 2004). Because of the previous domination of whites in the political system, South Africa chose a proportional representation system to give a more equal

<sup>13</sup> If these same vote totals were used to allocate five seats instead of six, there would be different outcome between these two quotas. For a further discussion, see Appendix B.

voice to the blacks in the nation. South Africa uses a Droop quota to allocate half of its 400-seat legislature through nine multi-member constituencies and the other half through a large 200-member national district (Mozaffar 2004, Reynolds 2004). Voters have only one vote and half the seats are allocated by quota and the other half (those in the nationwide constituency) are allocated proportionally with no threshold required for representation (Reynolds 2004).

*The Government by the People Green Party* is the official green party in South Africa. They offer two main principles to the voters, that all things are connected and what affects other people, flora, fauna, soil, or air affects us and that there should be individual responsibility in the decision-making process (Sole). It is this latter principle that further emphasizes the power that comes with having true political choice and how important it is for citizens to participate in government. Although many green parties have a tenet concerning democracy, the South African greens seem to speak with a voice that has long experienced silence.

Their goal is to “institute radical changes...in time to redress the destructive course we are at present bent on” (Sole). Furthermore they state “We want South Africa to again lead the world in introducing a sane approach to government which actually takes account of what is happening to the planet” (Sole). These greens list toxins in agriculture, global warming, and toxic waste as the most imminent dangers to their nation (Sole).

Another view expressed in their party platform, which appears to be unique to South Africa, is to end battery farming or caged farming. The proposed benefits are to alleviate the suffering of the animals, but also to help end human starvation. According

to Judy Sole of the Green Party of South Africa, over half of their arable land is being used to grow food for feedlot animals. By converting this land to growing food for human consumption, the Greens hope to lessen the effects of human starvation, lower rates of AIDS, infertility, heart attacks, Alzheimer's, strokes, and breast, prostate, and colon cancer (Sole).



Fig 5.4) The 1994 South African Ballot  
 Source : Henderson 2007.

### 5.3.2 Highest Average Systems

The second type of List PR systems are those that are known as the highest average systems. The highest average systems are more commonly used than the largest remainder systems (Farrell 2001). With these systems, the party's vote is divided by a series of divisors and the party with the 'highest average' after the each stage wins a seat. The process continues until all the seats are allocated. There are two major types of highest average systems, the d'Hondt method, named after Victor d'Hondt of Belgium, and the Sainte-Laguë method, after the Frenchman A. Sainte-Laguë (Farrell 2001). In America these are sometimes called the Jefferson and the Webster method respectively.

#### 5.3.2.1 d'Hondt Method / Jefferson

The d'Hondt or Jefferson highest average system is based upon whole number sequential divisors from 1 to infinity. This system is used in Argentina, Brazil, Bulgaria, Finland, Israel, and Luxembourg, as well as in Mozambique, the Netherlands, Portugal, Spain, Switzerland, Turkey, and Uruguay (Farrell 2001). To determine the seat allocation, the votes are sorted into piles by which party received the vote and then counted. The total votes received by each party are then divided by sequential integers starting with one. Then the seats are allocated to the party with the highest values.

|           | Total<br>Votes | $\frac{\text{Votes}}{1}$ | Seats           | $\frac{\text{Votes}}{2}$ | Seats           | $\frac{\text{Votes}}{3}$ | Total<br>Seats<br>Allocated |
|-----------|----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------------------|
| Jayhawks  | <b>328</b>     | 328                      | 1 <sup>st</sup> | 164                      | 4 <sup>th</sup> | 109                      | 2                           |
| Tigers    | <b>289</b>     | 289                      | 2 <sup>nd</sup> | 145                      | 5 <sup>th</sup> | 96                       | 2                           |
| Wildcats  | <b>113</b>     | 113                      | 6 <sup>th</sup> | 57                       |                 | 37                       | 1                           |
| Buffalos  | <b>176</b>     | 176                      | 3 <sup>rd</sup> | 88                       |                 | 59                       | 1                           |
| Longhorns | <b>94</b>      | 94                       |                 | 47                       |                 | 31                       | 0                           |

Fig 5.5) A Hypothetical Example of the d'Hondt Highest Average System

In this example, the 1,000 votes cast are used to allocate six seats to the five parties. The votes are divided by sequential integers and the seats are allocated in order of the number in parentheses. The actual allocation is from the highest number to the smallest number. The d'Hondt is one of the least proportional electoral formulas in the proportional representation system, yet it is still more proportional than the plurality or majoritarian systems (Lijphart 1994).

#### *5.3.2.1.1 The Greens of Finland*

Although the single member plurality or first-past-the-post predominates in Anglo-Saxon democracies, all of the Scandinavian countries (and others) choose to use a form of proportional representation. Belgium was actually the first country to use such an electoral system, followed quickly by Finland in 1906 followed by Sweden in 1907 (Farrell 2001). Proportional representation was introduced to Denmark in 1915-1920 (Pedersen 2002). However there are many forms of proportional representation and no two countries are entirely alike. Among all European nations, the Scandinavian countries are among the lowest in terms of disproportionality with a mean of 5.6 (Finland), 3.1 (Denmark), and 2.6 (Sweden) ranging from a moderate to extreme multiparty system with one or fewer dominant parties<sup>14</sup> (Siaroff 2000, 85-87).

Finland has a semi-presidential system in which most executive power, atypical of other semi-presidential systems, resides in the cabinet headed by the prime minister. The position of prime minister is granted to the leader of the party who has the most support

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<sup>14</sup> Siaroff categorizes Finland as being an extreme multiparty system with a balance among the parties, Denmark as a nation that has transitioned from a moderate multiparty system with a balance among the parties to an extreme multiparty system with one dominant party. He considers Sweden a nation that went from a moderate multiparty system with one dominant party to an extreme multiparty system with one dominant party.

in the parliamentary elections. Finland has a proportional representation system that encourages multiple parties and thus numerous coalition cabinets in the 200 member unicameral parliament, *Eduskunta*. The formation of government and the strengths of the parties vary depending on the results of the elections, but the primary parties are the Center Party (KESK) and the Social Democratic Party (SDP).

In Finland members of parliament are elected in four-year cycles and their district magnitude ranges from seven to thirty-seven seats (Farrell 2001). Voting is based upon the candidates (they have open lists), and uses the d'Hondt electoral system (Farrell 2001). The Finnish system favors larger parties and is the most popular proportional system used in the world today. The only exception to the d'Hondt method in Finland is the Åland Island, a predominantly Swedish-speaking area, which uses single-member plurality (Siaroff 2000).

The history of Finnish Greens began prior to when they first nominated candidates for parliamentary elections in 1979 (Müller-Rommel 1989). The roots of Vihreät Liitto can be traced back to a number of activist groups that emerged in the 1970s including a movement of disabled people, a group of radical feminists, and an environmental conservation group who chained themselves to machinery to prevent the drainage of Lake Kojjävari (Paastela 1989). Slowly these groups merged together and ran as Vihreät Liitto in 1979. They did not win any seats that year, but in 1983 the Greens gained greater support and won two seats<sup>15</sup> in the national parliament, *Eduskunta* (Müller-Rommel 1989, Paastela 1989). For fear of bureaucratization the Greens were not

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<sup>15</sup> One seat was taken by a wheelchair bound man who was the chairman of the disabled group while the other was given to the head of the environmental protesting group (Paastela 1989, 82).

a registered political party in Finland at that time, instead they were running on independent lists across the country (Paastela 2002). In 1987 they registered as an official party and continued to have moderate success winning seats in successive years (Paastela 2002). In 1991 the Greens won ten seats in parliament and also elected their first female representative (Paastela 2002).

Once in office the Greens wasted little time in letting the government officials know their views. Although they remained neutral on the hotly contested issue of whether or not to join the EC, the Greens were adamantly opposed to the idea of a single European currency (Paastela 2002). Throughout the 1990s the Greens pushed for an increase in energy taxation, which once passed, they claim, helped to decrease carbon-dioxide emissions by four million tons (Paastela 2002). Similar to other Greens, the supporters of the *Vihreät Liitto* are typically young, affluent, and well-educated. Paastela finds that fifty percent of the green electorate is between 18-30 years of age (Paastela 1989). Furthermore almost forty percent of them have passed matriculation exams, a feat of which only nine percent of the total population can boast of having achieved (Paastela 1989).

#### *5.3.2.1.2 Partidul Ecologist din Moldova “Aliante Verde” (PEM AVE) - Moldova*

Moldova offers a chance to explore the effect of electoral systems on Green Parties within post-Communist nations. Unlike any of the other countries included in this study, Moldova has a single, nation-wide constituency (Inter-Parliamentary Union 1998). When determining what electoral system to choose, Moldova decided to choose a proportional representation system based on the d’Hondt system with a variety of thresholds. Candidates and parties that do not meet these limits are unable to gain seats

in Parliament. Although voting is not compulsory, Moldova is unique in that at least one half of all registered voters must vote in order for the elections to be declared valid (Inter-Parliamentary Union 1998).

Of the post-Communist countries that emerged in the 1990s, a majority have chosen proportional representation including Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Latvia, Poland, Romania, Slovakia, and Slovenia (Birch 2003). However mixed proportional single-member systems are found in Albania, Armenia, Azerbaijan, Georgia, Hungary, Lithuania, Russia, and Ukraine (Birch 2003). Debates about which electoral system post-Communist countries should adopt focused primarily on making sure that the electorate had a choice between candidates and parties, but not forcing them to vote (Birch 2003).

After declaring its independence in August of 1991, it did not take long for Moldova to form a Green Party. Founded on April 9, 1992, the Partidul Ecologist din Moldova “Aliante Verde” (PEM AVE) was the second party to be officially recognized in the new nation (European Greens 2007). The green movement was active since the beginning of the 1980s via journalism and art (European Greens 2007). PEM AVE has been successful at electing representatives at local and district levels. They took part in the 1995, 1999, and 2003 local elections and the 1994 and 1998 parliamentary elections (Association for Participatory Democracy 2007). At the parliamentary level they were unsuccessful in 1994 but in the 1998 elections they received 19.42% of the vote and were awarded 26 seats in parliament. As of 1999 the party had almost 8,500 members and hopes of increasing that number in the future (Association for Participatory Democracy 2007).

# ALEGERILE PARLAMENTULUI REPUBLICII MOLDOVA ВЫБОРЫ ПАРЛАМЕНТА РЕСПУБЛИКИ МОЛДОВА

6 martie 2005 • 6 марта 2005

## PROCES-VERBAL ПРОТОКОЛ

privind rezultatul numărării voturilor întocmit de biroul electoral al secției de votare nr. \_\_\_\_\_  
 о результатах подсчета голосов составленный участковым избирательным бюро № \_\_\_\_\_

(satul (comuna), orașul, municipiul, raionul, U.T.A. Găgăuzia)  
 (село (коммуна), город, муниципий, район, ТАО Гагаузия)

În conformitate cu art. 58 și 85 din Codul electoral, biroul electoral al secției de votare a stabilit:  
 В соответствии со статьями 58 и 85 Кодекса о выборах участковое избирательное бюро установило:

- |  |  |
|--|--|
| a) numărul de alegători incluși în listele electorale<br>число избирателей, внесенных в списки избирателей <input style="width: 100px;" type="text"/>      | d) numărul de alegători care au participat la votare<br>число избирателей, принявших участие в голосовании <input style="width: 100px;" type="text"/>  |
| b) numărul de alegători incluși în listele suplimentare<br>число избирателей, внесенных в дополнительные списки <input style="width: 100px;" type="text"/> | e) numărul buletinelor de vot declarate nevalabile<br>количество избирательных бюллетеней, признанных недействительными <input style="width: 100px;" type="text"/>                                     |
| c) numărul de alegători care au primit buletine de vot<br>число избирателей, получивших избирательные бюллетени <input style="width: 100px;" type="text"/> | f) numărul de voturi valabil exprimate pentru fiecare concurent electoral:<br>количество действительных голосов, поданных за каждого конкурента на выборах: <input style="width: 100px;" type="text"/> |

| Nr. № | Concurentul electoral • Конкурент  | Numărul de voturi obținute<br>Кол-во полученных голосов |
|-------|--|---|
| 1     | Partidul Comuniștilor din Republica Moldova • Партия Коммунистов Республики Молдова                                  |   |
| 2     | Partidul Popular Creștin Democrat • Христианско-Демократическая Народная Партия                                      |   |
| 3     | Blocul electoral "MOLDOVA DEMOCRATĂ" • Блок "Демократическая Молдова"  |   |
| 4     | Partidul Social Democrat din Moldova • Социал-Демократическая Партия Молдовы   |   |
| 5     | Blocul electoral "Patria-Rodina" • Избирательный блок "Patria-Rodina"  |   |
| 6     | Kirilov Silvia, candidat independent • Кириллов Сильвия, независимый кандидат  |   |
| 7     | Mișcarea social-politică Republicană "РАВНОПРАВИЕ" • Республиканское общественно-политическое движение "РАВНОПРАВИЕ" |   |
| 8     | Uniunea Centristă din Moldova • Центристский Союз Молдовы  |   |
| 9     | Buşmachi Alexandru, candidat independent • Бушмакчу Александру, независимый кандидат                                 |   |
| 10    | Partidul Uniunea Muncii "Patria-Rodina" • Союз Труда "Patria-Rodina"   |   |
| 11    | Laşuta Maia, candidat independent • Лаşута Майя, независимый кандидат  |   |
| 12    | Matei Ştefan, candidat independent • Матеи Штефан, независимый кандидат  |   |
| 13    | Partidul Țărănesc Creștin Democrat din Moldova • Крестьянская Демократическая Христианская Партия Молдовы            |   |
| 14    | Ivanțoc Andrei, candidat independent • Иванцок Андрей, независимый кандидат  |   |
| 15    | Arsenii Alexandru, candidat independent • Арсений Александру, независимый кандидат                                   |   |
| 16    | Busuioac Alexei, candidat independent • Бусуйок Алексей, независимый кандидат  |   |
| 17    | Tătaru Tudor, candidat independent • Тăтару Тудор, независимый кандидат  |   |
| 18    | Ghelici Fiodor, candidat independent • Геличи Фѣдор, независимый кандидат  |   |
| 19    | Slivinschi Victor, candidat independent • Сливянски Виктор, независимый кандидат                                     |   |
| 20    | Soloviov Anatolii, candidat independent • Соловьев Анатолий, независимый кандидат                                    |   |
| 21    | Partidul Republican din Moldova • Республиканская Партия Молдовы   |   |
| 22    | Tiron Mircea, candidat independent • Тирон Мирча, независимый кандидат   |   |
| 23    | Partidul Dreptății Social-Economice din Moldova • Партия Социально-Экономической Справедливости Молдовы              |   |

- |   |  |
|---|--|
| g) numărul total de voturi valabil exprimate<br>общее количество действительных голосов <input style="width: 100px;" type="text"/>  | i) numărul buletinelor de vot neutilizate și anulate<br>количество неиспользованных и погашенных избирательных бюллетеней <input style="width: 100px;" type="text"/> |
| h) numărul buletinelor de vot primite de biroul electoral al secției de votare<br>общее количество действительных голосов, полученных участковым избирательным советом <input style="width: 100px;" type="text"/> |  |

|                                       |  |                                      |
|---------------------------------------|--|--------------------------------------|
|                                       | Membrii biroului electoral:<br>Члены избирательного бюро |                                      |
| Numele și prenumele<br>Фамилия и имя  | Semnătura<br>Подпись                                     | Numele și prenumele<br>Фамилия и имя |
| Președintele<br>Председатель          | _____  | 1. _____                             |
| Vicepreședintele<br>Зам. председателя | _____  | 2. _____                             |
| Secretarul<br>Секретарь               | _____  | 3. _____                             |
|                                       |  | 4. _____                             |
|                                       |  | 5. _____                             |
|                                       |  | 6. _____                             |
|                                       |  | 7. _____                             |
|                                       |  | 8. _____                             |

Data întocmirii procesului-verbal " \_\_\_\_\_ " \_\_\_\_\_ 2005  
 Дата составления протокола

Fig 5.6) A Sample Moldovan Electoral Document  
 Source: Association for Participatory Democracy 2007

### 5.3.2.2 Sainte-Laguë Method and Modified Sainte-Laguë

The pure Sainte-Laguë Method, or the Webster method as it is known in the United States, is sometimes criticized for being too proportional. Therefore the modified Sainte-Laguë is used in Denmark, Norway, and Sweden. The best method of explaining this somewhat complicated system is to offer a generic model for a nation in which there are five parties (Jayhawks, Tigers, Wildcats, Buffalos, and Longhorns) running for 6 positions and seats are allocated under the modified Sainte-Laguë.

| Party     | Votes      | $\frac{\text{Votes}}{1.4}$ |                 | $\frac{\text{Votes}}{3}$ |                 | $\frac{\text{Votes}}{5}$ |  | Total Seats |
|-----------|------------|----------------------------|-----------------|--------------------------|-----------------|--------------------------|--|-------------|
| Jayhawks  | <b>328</b> | 234                        | 1 <sup>st</sup> | 109                      | 4 <sup>th</sup> | 66                       |  | 2           |
| Tigers    | <b>289</b> | 206                        | 2 <sup>nd</sup> | 96                       | 5 <sup>th</sup> | 59                       |  | 2           |
| Wildcats  | <b>113</b> | 81                         | 6 <sup>th</sup> | 38                       |                 | 23                       |  | 1           |
| Buffalos  | <b>176</b> | 126                        | 3 <sup>rd</sup> | 59                       |                 | 35                       |  | 1           |
| Longhorns | <b>94</b>  | 67                         |                 | 31                       |                 | 19                       |  | 0           |

Fig 5.7) A Hypothetical Example of the Modified Sainte-Laguë Highest Average System

In this mock situation 1,000 votes were cast in the same way as before. The total number of votes received by each party is listed in the second column. Each vote total is then received are divided by sequential odd numbers (1.4, 3, 5, 7, 9).<sup>16</sup> The order in which seats are allocated is noted in the table above. Of the six seats, two of them go to the Jayhawks and the Tigers who received 33% and 29% respectively and one each to the Wildcats and the Buffalo party.

Even in its modified state, this system is more proportional than the d'Hondt method. A simple exercise in expanding the number of seats in the district (as shown in

<sup>16</sup> In a true Sainte-Laguë system, the divisors would begin with 1 instead of 1.4 and increase sequentially by odd number.

Fig 5.8) helps to prove this point. In the d'Hondt system, the seventh seat would be allocated to the Jayhawks bringing the total number of seats to: Jayhawks (3), Tigers (2), Wildcats (1), Buffalos (1) and Longhorns (0). However, when the example of the modified Sainte-Laguë method is expanded to seven seats, the final seat is awarded to the Longhorns. That changes the total seat allocation to: Jayhawks (2), Tigers (2), Wildcats (1), Buffalos (1) and Longhorns (1) producing a more proportional result overall.

| Party     | Total Votes | $\frac{\text{Votes}}{1}$ | Seats           | $\frac{\text{Votes}}{2}$ | Seats           | $\frac{\text{Votes}}{3}$ |                 | Total Seats |
|-----------|-------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|-------------|
| Jayhawks  | <b>328</b>  | 328                      | 1 <sup>st</sup> | 164                      | 4 <sup>th</sup> | 109                      | 7 <sup>th</sup> | 3           |
| Tigers    | <b>289</b>  | 289                      | 2 <sup>nd</sup> | 145                      | 5 <sup>th</sup> | 96                       |                 | 2           |
| Wildcats  | <b>113</b>  | 113                      | 6 <sup>th</sup> | 57                       |                 | 37                       |                 | 1           |
| Buffalos  | <b>176</b>  | 176                      | 3 <sup>rd</sup> | 88                       |                 | 59                       |                 | 1           |
| Longhorns | <b>94</b>   | 94                       |                 | 47                       |                 | 31                       |                 | 0           |

| Party     | Votes      | $\frac{\text{Votes}}{1.4}$ |                 | $\frac{\text{Votes}}{3}$ |                 | $\frac{\text{Votes}}{5}$ |  | Total Seats |
|-----------|------------|----------------------------|-----------------|--------------------------|-----------------|--------------------------|--|-------------|
| Jayhawks  | <b>328</b> | 234                        | 1 <sup>st</sup> | 109                      | 4 <sup>th</sup> | 66                       |  | 2           |
| Tigers    | <b>289</b> | 206                        | 2 <sup>nd</sup> | 96                       | 5 <sup>th</sup> | 59                       |  | 2           |
| Wildcats  | <b>113</b> | 81                         | 6 <sup>th</sup> | 38                       |                 | 23                       |  | 1           |
| Buffalos  | <b>176</b> | 126                        | 3 <sup>rd</sup> | 59                       |                 | 35                       |  | 1           |
| Longhorns | <b>94</b>  | 67                         | 7 <sup>th</sup> | 31                       |                 | 19                       |  | 1           |

Fig 5.8) A Comparison of Disproportionality between d'Hondt and Sainte-Laguë by increasing the number of seats.

### 5.3.2.2.1 Danish Greens - De Grønne

The Sainte-Laguë method is most closely associated with the Scandinavian countries. Denmark has a multi-party system in which no one party has held an absolute majority since the beginning of the 20<sup>th</sup> century. The government is headed by a prime minister who exercises the executive power. The legislative power is shared by the government and the parliament, *Folketing*. The Danish parliament tends to be more

powerful than other European countries since bills passed often require the negotiations of supporting and opposition parties. The government is divided into departments known as Ministries and such departments are led by Ministers.

Throughout the Danish constituencies, 135 members are elected by proportional majority, 40 seats are allotted proportional to the number of votes a party receives, and the remaining four seats are divided equally between the Faroe Islands and Greenland (Schüttemeyer 1989). Crucial to the success of any small party, any party or list that receives more than 2% of the total vote is guaranteed representation in *Folketing*. By maintaining a threshold of 2%, lower than any other country in Europe, the Danish electoral system practically assures a multi-party system and representation of smaller parties in parliament. Any desire to increase the threshold would be met by opposition from the smaller parties and any attempts to lower it would be opposed by the larger parties.

Danish parties are structured in a similar manner to many other countries although they vary widely amongst themselves in size and scope. In the 1960s, four major parties dominated the political scene in Denmark: the Agrarian Liberals, the Conservative People's Party, the Social Democrats, and the Radical Liberals (Schüttemeyer 1989). In the early 1970s, the issue of whether or not to join the European Commission (EC) split the electorate and doubled the number of parties in the *Folketing*, the Danish parliament (Schüttemeyer 1989). This fragmentation helped pave the way for smaller parties many of whom, "Have never been able to – or wanted to – build up strong organizations" (Pedersen 2002). In 1973-1974, the association of electric power plants generated a large concern about nuclear energy when asking to build Denmark's first nuclear power plant

(Andersen 1990). When this conflict was resolved, citizens began to focus attention on environmental issues such as toxic dumping grounds, ground water pollution, and air pollution (Andersen 1990).

The Danish Greens (De Grønne) appeared in 1983 and ran their first campaign in November 1985. At that time they were able to garner 2.8% of the vote surpassing the 2% minimum requirement for representation in *Folketing* (Schüttemeyer 1989). However 1985 was a local election, and when the national election was held in 1986 the Greens found themselves short of support (Schüttemeyer 1989). The party platform of De Grønne is focused around the issues of ecological preservation, a society free of violence, the promotion of a grassroots democracy, and the desire to end poverty and security issues to improve the citizen's self-esteem and independence (Schüttemeyer 1989). Other issues of vital importance to the Danish Greens at that time were the desire to withdraw from the European Commission, abolish NATO, and to end the Warsaw Pact (Schüttemeyer 1989). As with many other Green parties, De Grønne is popular with young Danish voters and the well-educated (Schüttemeyer 1989). Most of the support comes from the more densely populated urban areas, in particular Copenhagen (Schüttemeyer 1989).

#### 5.3.2.2.2 Swedish Greens - *Miljöpartiet De Gröna*

Hosting the largest unicameral legislature in this study is the *Riksdag* of Sweden with 349 members<sup>17</sup>. A vast majority of these members, 310, are elected in multimember districts and the remaining 39 are elected nationally to ensure greater representation

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<sup>17</sup> At one time there were 350 seats in the *Riksdag*, but after a 175 to 175 tie between the socialists and non-socialists in 1973 the number was reduced to 349 (Siaroff 2000).

(Siaroff 2000). These latter 39 serve as a form of compensation to the largest parties who may lose seats in the individual constituencies but maintain popular support overall (Hancock 2003). Like Denmark, the electoral system of Sweden is based upon the Sainte-Laguë system and elections are held every four years. In 1970 a threshold was implemented such that if a party receives at least 4% of the national vote, or 12% of the vote in a single constituency, than they are eligible for a seat in the parliament (Siaroff 2000, Hancock 2003).

The Social Democratic Worker's Party (SAP) traditionally dominates the Swedish system, but in recent years a number of smaller parties have formed. Such party fragmentation has not lead to a political stalemate or government immobility; instead the multiparty system has proved quite adept at forming sustainable governments and able to adjust to changes in the economic and social conditions (Hancock 2003).

In 1988 the *Miljöpartiet De Gröna*, the Environment Party, entered into the Swedish parliament, a historically significant event, as they were the first new party to enter in the Swedish *Riksdag* in seventy years (Bennulf and Holmberg 1990). Such a feat was the culmination of almost two decades worth of work at the local level. The first environmental party was a local party formed in 1972 in Ängelholm whose primary focus was nuclear energy (Vedung 1989). This concentration on the nuclear power conflict helped generate tension in the traditional left-right axis and to create a more powerful spotlight on environmental issues (Vedung 1989). The increasing salience of environmental issues can be used to explain the success of the Greens in 1988 as opposed to any previous election. During the campaign season the media consistently produced news focusing on forest damage caused by acid rain, dioxins in milk, poisonous algae,

pollution in cities, and a surge of dead seals on Sweden's western coastline (Vedung 1989; Bennulf and Holmberg 1990). Approximately one-quarter of all election coverage by the media throughout 1988 was committed to issues of environmental concern (Bennulf and Holmberg 1990).

The name Miljöpartiet De Gröna literally translates into, "Environment Party," yet it has a much broader scope of interest than that of most green parties (Bennulf and Holmberg 1990). The Swedish Greens feel that people and the environment should both be placed before short-term economic interests and therefore promote a range of action encompassing social justice, children's rights, animal rights, gender equality, anti-discrimination, and self-reliance (Miljöpartiet De Gröna Party Platform 2006). The organizational structure of the Miljöpartiet De Gröna provides an introspective glance into the underlying principles of the Green party. Within its structure there is a focus on, "Decentralization, local influence, direct democracy, and the diffusion of power" (Vedung 1989, 145). An interesting tenet introduced to "impede authoritarian tendencies" is that for all of the Green Party's national committees, the gender ratio must be six women for every five men (Vedung 1989, 147).

#### *5.4 Mixed Member Proportional*

In order to solve the alleged flaws of plurality and majoritarian systems (lack of proportionality) and the perceived problems of traditional list systems (lack of constituency representation), some nations are turning to the hybrid system known as mixed member proportional (MMP) systems. As such, the MMP system actually contains two different electoral formulae on the same ballot. For many years, the only

nation that fit into this category was West Germany, but now there are nine<sup>18</sup> (International IDEA 2005).

At one time, electoral systems were categorized broadly into plurality/majority systems and proportional systems (Shugart and Wattenburg 2001). MMP systems at their most basic blend the two principle methods of electoral system design, yet there are a number of variations upon the MMP theme making them a difficult group to define (Shugart and Wattenburg 2001). Shugart and Wattenburg define MMP systems as a:

Subset of the broader category of *multiple-tier* electoral systems. An electoral system employs multiple tiers if seats are allocated in two (or more) overlapping sets of districts, such that every voter may cast one or more votes that are employed to allocate seats in more than one tier.

(Shugart and Wattenburg 2001, 10)

An alternative definition of MMP is, “a mixed system in which the choices expressed by voters are used to elect representatives through two different systems – one List PR system and (usually) one plurality/majority system...” and the distinction which is also used to differentiate MMP from parallel systems for this study, “... – where the List PR system compensates for the disproportionality in the results from the plurality/majority system” (International IDEA 2005).

Because of the use of List PR to reduce the effects of disproportionality, I choose to include MMP systems as part of the List systems branch of the electoral system family tree. Each MMP system has a List element and it is the use of the other (plurality or majority) electoral system that makes each unique. The systems that utilize both List

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<sup>18</sup> The nine nations that use MMP systems are Albania, Bolivia, Germany, Hungary, Italy, Lesotho, Mexico, New Zealand, and Venezuela (International IDEA 2005).

elements and a plurality or majority system but do not attempt to reduce disproportionality will be discussed in the section on parallel systems (Section 6.2).

#### *5.4.1 New Zealand Greens*

Until 1996, New Zealand had an electoral system that was based on first-past-the-post. However, in the early 1990s the Kiwis determined that such a system discriminated in favor of the two largest parties and decided they needed to switch electoral systems. In two separate referenda New Zealand opted in favor of change. First New Zealand decided in a 53.9% to 46.1% vote that they wanted to abandon the plurality electoral system, and then they took a second vote to determine which system should be implemented (Barker et al 2001). What they came up with was a MMP system, adopted in hopes of increasing fairness to all parties.

Under the New Zealand mixed MMP system, each voter casts two votes. One vote is for the representative of the constituency, and whoever receives the most votes in that district wins. The second vote a list vote for the political party that the voter wishes to be in government. As in all MMP systems, the list vote is compensatory, it is meant to help ensure the overall proportionality of the vote (Bale 2005). The number of votes a party receives is translated into one of the 120 seats in Parliament, provided the party crosses the national threshold of 5% or about 134,000 votes (Palmer and Palmer 2004, New Zealand Ministry of Justice 2005).

This change has made the New Zealand Parliament more representative of the diversity within the electorate (Palmer and Palmer 2004). Also, because of this switch New Zealand is now governed by coalition governments instead of single-party majority governments. The fragmentation of parties in New Zealand from two (the Labour and

National) to around six (including a Maori party, a Green party, the New Zealand First, has led to an increase in cooperation in government as each party sees the need to give and take with their opposition (Barker et al 2001).

New Zealand uses the Sainte-Laguë formula to allocate seats to parties that have crossed the threshold of 5% of all party votes cast nationally or at least one single-member district seat (New Zealand Ministry of Justice 2005). After an election, the Chief Electoral Officer creates a list of all the parties that ran, the number of party votes it won, the percentage that it received of all party votes cast, and the number of electorate seats won. The parties that did not cross the threshold are then removed from the list unless they were able to win an electoral seat in a constituency. The parties that remain are included in a table where the total number of party votes received is divided by sequential odd numbers (1, 3, 5, 7, 9) and the remaining seats (those not allocated by the constituency) are awarded to the largest quotients that remain.

Traditionally viewed as the first modern green party to form, the New Zealand Values Party emerged on the scene in 1972. As a progressive new left movement, the Values Party competed in the 1972 and 1975 elections with a stance against nuclear power and armaments and in favor of reforming drug laws. The Values Party also receives credit for being the first to politicize the environmental issue, forcing existing parties to take stances. At that time the Values Party was unable to win any seats in parliament, but it did celebrate victory at the local level. 1978 was another unsuccessful year at the national level for this newly emerging group. It is important to note that the economic scene in New Zealand was changing at that time, and the rising unemployment rates turned voter's attention toward the National Party of New Zealand.

Over time, the Values Party began to experience internal conflict and soon splintered. In 1990 some of the fragments joined together and formed the Green Party of Aotearoa New Zealand. Many activists from the Values Party such as Jeanette Fitzsimons found the new Green Party acceptable. This party has had more parliamentary success usually receiving between six and ten parliamentary seats. The Green Party of New Zealand is only one of many political parties in New Zealand. The country resembles a two-party state, but is continually showing signs of becoming a stable multi-party state. The first party in New Zealand was the Liberal Party which began in 1891 followed by the Reform Party. Gradually these two parties merged together in opposition to the Labour Party, as the National Party. This dichotomy still dominates the New Zealand political scene. The traditional first-past-the-post system prevented successful third parties from forming, but the mixed member proportional (MMP) system that was introduced in 1996 made it easier for smaller parties to enter into Parliament (Farrell 2001). Since the change to MMP approximately one-third of all seats have been held by members that are not of the Labour or National Parties (New Zealand Ministry of Justice 2005).

New Zealand allows for political parties to either be registered, in which case they need to have five-hundred eligible voters paying the party, or unregistered. Registered parties submit a party list of members that they wish to nominate to serve in the New Zealand Parliament. Currently the Green Party, led by Jeanette Fitzsimons and Russel Norman, holds six seats in parliament (New Zealand Ministry of Justice 2005). Their most recent campaigns have focused on the carbon tax which it favors and genetic engineering which it condemns. In 1989 the Greens attracted 6.8% of the national vote

and were thought of as a means of protest that “reflected a disillusionment of with the policies of the established parties” (Levine and Roberts 1992). In 2005 the Greens received 5.3% of the vote and were allocated 0 electorate seats and 6 party seats (New Zealand Ministry of Justice 2005).

The New Zealand Green Party bases its platform on four tenants: Ecological Wisdom, Social Responsibility, Appropriate Decision-making and Non-Violence (New Zealand Ministry of Justice 2005). In regards to the native Maori population the Greens want to respect Te Tiriti o Waitangi and enable tikanga Maori (the traditions and customs of the Maori) to be taught in school. They seek GE free foods, social and economic justice, peace, and stronger conservation efforts. There are currently six Green Members of Parliament including four women.



#### 5.4.2 *German Greens*

Germany has the longest established MMP system in the world, dating back to 1949 (Farrell 2001). There was a form of MMP used from as early as 1906 to 1918 in the kingdom of Württemberg, but nationwide-MMP was not adopted until the post-war era (Farrell 2001). With only a few minor changes, the system in use today originated in 1956 in attempts to allow constituency representation but avoid allowing extremist groups into power (Scarrow 2001).

Germany's parliament (*Bundestag*) contains 598 members, half of which are elected from lists and the other half from constituencies (Farrell 2001). In each election, a voter is given two separate votes. The two-vote arrangement makes it both possible and simple for voters to split their tickets (Scarrow 2001). The first vote (*Erststimme*) is the first-past-the-post vote for a specific candidate that occurs in single-member districts (Farrell 2001, Riker 1982). The second vote (*Zweitstimme*) is the party list vote where seats are awarded in a statewide multi-member district in proportional manner (Riker 1982). Like New Zealand, the first vote allows MPs to be elected from individual constituencies and the second vote helps adjust the numbers in parliament to make them more proportional. The major distortion of this system is due to the threshold of at least 5% of the national vote or winning at least one constituency seat, which is used to keep extremist groups out of power.

**Stimmzettel**  
für die Wahl zum Deutschen Bundestag im Wahlkreis 136 Kreisfreie Stadt Wiesbaden am 2. Dezember 1990

# Sie haben 2 Stimmen

**hier 1 Stimme**  
für die Wahl  
eines/einer Wahlkreis-  
abgeordneten  
**Erststimme**

**hier 1 Stimme**  
für die Wahl  
einer Landesliste (Partei)  
- maßgebende Stimme für die Verteilung der  
Sitze insgesamt auf die einzelnen Parteien -  
**Zweitstimme**

|   |  |  |                       |
|---|--|--|-----------------------|
| 1 | <b>Rönsch, Hannelore</b><br>Angestellte<br>6200 Wiesbaden<br>Carl-von-Ossietsky-Str. 38        | CDU<br>Christlich<br>Demokratische<br>Union Deutschlands   | <input type="radio"/> |
| 2 | <b>Wieczorek-Zeul, Heidemarie</b><br>Lehrerin<br>6200 Wiesbaden<br>Walkmühlstraße 39           | SPD<br>Sozialdemokratische<br>Partei<br>Deutschlands   | <input type="radio"/> |
| 3 | <b>Koch, Ulrich Friedrich</b><br>Sozialarbeiter<br>6200 Wiesbaden<br>Feldstraße 27             | GRÜNE<br>DIE GRÜNEN  | <input type="radio"/> |
| 4 | <b>Dr. Funke-Schmitt-Rink, Margret</b><br>Studentin<br>6200 Wiesbaden<br>Sonnenberger Straße 3 | F.D.P.<br>Freie<br>Demokratische<br>Partei   | <input type="radio"/> |
|   |  |  |                       |
| 6 | <b>Langer, Herbert</b><br>Prokurist<br>6200 Wiesbaden<br>Sonnenberger Str. 27                  | REP<br>DIE REPUBLIKANER  | <input type="radio"/> |
| 7 | <b>Deubert, Ernst Wilhelm</b><br>Rentner<br>6000 Frankfurt/Main 60<br>Bergerstraße 234         | NPD<br>National-<br>demokratische<br>Partei<br>Deutschlands  | <input type="radio"/> |
|   |  |  |                       |
|   |  |  |                       |
| 1 | <input type="radio"/>  | CDU<br>Christlich Demokratische<br>Union Deutschlands<br><small>Dr. Albrecht Diggler, Hannelore Rönsch,<br/>Dr. Christen Schwere-Schilling,<br/>Dr. Heinz Rosenhuber, Bernhard Jagoda</small>              | 1                     |
| 2 | <input type="radio"/>  | SPD<br>Sozialdemokratische<br>Partei Deutschlands<br><small>Heidemarie Wieceorek-Zeul,<br/>Rudi Wäthler, Dr. Dietrich Sperling,<br/>Uta Zapf, Karsten Voigt</small>  | 2                     |
| 3 | <input type="radio"/>  | GRÜNE<br>DIE GRÜNEN<br><small>Ulrich Fiedel, Hubert Kleinert,<br/>Marina Ständer, Dietrich Weitzel,<br/>Friedr. Klar</small>   | 3                     |
| 4 | <input type="radio"/>  | F.D.P.<br>Freie Demokratische Partei<br><small>Dr. Hermann Otto Prinz zu<br/>Solms-Hohensolms-Lich,<br/>Hans-Joachim Otto, Dr. Gisela Siebel,<br/>Dieterhard Giese, Dr. Heinrich Kolb</small>              | 4                     |
| 5 | <input type="radio"/>  | DIE GRAUEN<br>DIE GRAUEN Initiiert vom<br>Senioren-Schutz-Bund<br>„Graue Panther“ e.V.<br>(„SSB-GP“)<br><small>Ludwig Heise, Sibylle Schönig, Karl Röh,<br/>Dr. Hildegard Mulert, Arno Hildebrandt</small> | 5                     |
| 6 | <input type="radio"/>  | REP<br>DIE REPUBLIKANER<br><small>Gert Feldmeier, Herbert Langer,<br/>Birgitte Klauert, Peter Münch,<br/>Günter Hülmer</small>   | 6                     |
| 7 | <input type="radio"/>  | NPD<br>Nationaldemokratische<br>Partei Deutschlands<br><small>Wolfgang Krauß, Doris Zuff,<br/>Hans Schmidt, Dieter Fußmann,<br/>Volker Sachs</small>   | 7                     |
| 8 | <input type="radio"/>  | ÖDP<br>Ökologisch-Demokratische<br>Partei<br><small>Gerhard Mahnke, Waltraud Schunck,<br/>Manika Zickhoff, Dr. Wolfgang Gänther,<br/>Rolf-Oswald Klar</small>  | 8                     |
| 9 | <input type="radio"/>  | PDS/<br>Linke<br>Liste<br>Partei des Demokratischen<br>Sozialismus/Linke Liste<br><small>Manfred Coppel, Angela Knot,<br/>Heike Schülzer, Manfred Aler,<br/>Reinhold Röhler</small>                        | 9                     |

Fig. 5.10) A Sample German Ballot  
Source: Accurate Democracy 2007

When allocating seats, the votes for constituency representation are awarded first. This works under the basic SMP system and whoever receives the most votes, wins. The second vote, the list vote, is what restores the proportionality of the system and gives smaller parties a better chance. The parties that do not meet the threshold are removed

and the Hare Quota is applied to the remainder of the parties (Farrell 2001). One factor that makes the German system unique<sup>19</sup> is that the total number of seats won by the party is subtracted from the total number of list seats that they were allocated (Farrell 2001). Therefore if a party wins 48 seats from the *Zweitstimme* and it has already been allocated 35 seats from the *Erststimme* then the party will only receive 13 additional seats, hence its nickname, ‘additional member’ system. If a party wins more seats at the constituency level than it would be awarded from its list vote, it is allowed to keep the surplus seats and the size of the *Bundestag* is temporarily enlarged (Farrell 2001).

The German Green Party, *Die Grünen*, (The Green) traces its roots back to the late 1970s when small Green Parties began to form regionally. Although not the oldest, the German Greens are one of the most famous and electorally successful Green Parties in the world. In 1980 *Die Grünen* became a national party and since 1983 they have been a part of almost every national parliament (Siaroff 2000). *Die Grünen* polled 3.8% of the vote in 1990, 7.3% in 1994 (giving them 49 seats), 6.7% in 1998 (with 47 seats), and 8.6% in 2002 (52 seats) (Inter-Parliamentary Union 2007). In 1998 the German Greens entered the national government for the first time and they now hold a spot in the foreign ministry (Siaroff 2000). It is rare that a Green Party would fare so well as to receive almost 10% of the nationwide vote. For this reason *Die Grünen*, is used as a role model for other newly emerging Green Parties. The impact of *Die Grünen* can be seen in German politics as the nation focuses on sustainability in the new millennium.

Another important triumph in German Green history was the appointment of Joseph Martin “Joschka” Fischer as a foreign minister from 1998 to 2005. After

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<sup>19</sup> Along with other nations that use the German MMP system

participating in the student protest movement in the 1960s, serving on the Frankfurt city council, and being a member of the Bundestag, Fischer was a logical choice for Minister of the Environment in 1985 (Mewes 1998). In 1998, Germany elected Gerhard Schröder of the Social Democrats into power. The SPD (Social Democrats) and the Greens formed a coalition government and as a result of much negotiation, when the new government took power Fischer was the Minister of Foreign Affairs.

### *5.5 Conclusion of Proportional Representation*

Representing 70 of the 191 democracies used in this study, proportional representation systems are by far the most popular electoral system in use today. They are popular because they offer greater proportionality than plurality or majority systems as well as the fact that PR systems can lead to increased representation of women and minorities. Furthermore PR systems tend to lead to fewer wasted votes than plurality or majority systems. As noted by the International Institute for Democracy and Electoral Assistance, 14 nations have recently moved from plurality and majority to mixed or PR systems, yet not a single List system nation has become a plurality or majoritarian system (Reynolds and Reilly 1997). The few nations that have abandoned List systems have switched to mixed member proportional systems.

## Chapter 6: Semi-Proportional Systems

- 6.1 Overview of the Semi-Proportional Systems
- 6.2 Parallel Votes
  - 6.2.1 The Japanese Greens – The Rainbow and the Greens
  - 6.2.2 The Philippines and their Green Party
- 6.3 Single Non-Transferable Vote
  - 6.3.1 SNTV in Vanuatu
- 6.4 Conclusion of Semi-Proportional Effects

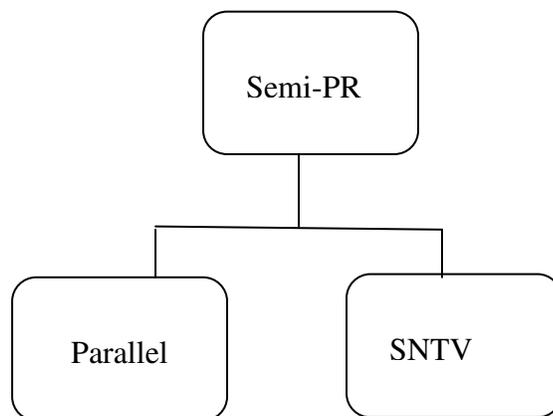


Fig 6.1) The Semi-PR Branch of the Electoral System Family Tree

### *6.1 Overview of the Semi-Proportional Systems*

There are a few countries that use an electoral system that falls in-between the rates of proportionality found in List PR systems and the disproportionality found in majoritarian or plurality systems. This brings us to the final subgroup of electoral systems, those that are known as “semi-proportional.” The two semi-proportional systems that will be discussed are the parallel system and the single non-transferable vote. Overall semi-proportional systems account for 24 of the 191 countries in this study, or about 12.5%.

## *6.2 Parallel Votes*

The parallel voting system is used in Japan, South Korea, Russia, and a number of smaller countries.<sup>20</sup> Parallel systems obtain their name from their use of both PR lists and single-member districts simultaneously. As a result some members of the legislature are elected by proportional representation and others by the plurality method (Reilly and Reynolds 1999). Similar to MMP systems, this method appears to combine the benefits of plurality and PR systems. One such advantage is smaller parties, such as the Greens, who might be unsuccessful in traditional plurality systems can win seats via the proportional allocation. But at the same time, parallel systems are less proportional than pure PR systems. Furthermore, parallel systems lack the simplicity of plurality or majoritarian systems and can create voter confusion.

Parallel systems are not to be confused with MMP systems. Although both combine PR and plurality systems, the major distinction comes from the fact that MMP systems are inherently more compensatory than parallel systems. MMP systems use the PR Lists to compensate for disproportionality within their districts, but parallel systems do not. Systems such as the German system distribute seats in a corrective way which helps the smaller parties that did not fare well in single-member seats to gain greater representation in parliament (Blais and Massicotte 2002).

The following example shows a hypothetical seat distribution in a Mixed Member Proportional system. There are five parties competing for 200 seats where half are

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<sup>20</sup> Other nations using parallel voting include: Andorra, Armenia, Azerbaijan, Georgia, Guinea, Kazakhstan, Lithuania, Monaco, Pakistan, Palestinian Authority, Philippines, Senegal, Seychelles, Taiwan, Tajikistan, Thailand, Tunisia, and Ukraine (International IDEA 2005).

determined by the plurality or majority system and the remaining half are through proportional representation, taking into account the first allotment of seats. The first row lists the parties; the second row shows the number of nominal seats each party won by election of candidates in the plurality or majority system ( $n$ ). The third row shows what percentage of the vote ( $v$ ) each party received in the mock election.

|         | <b>Party</b>                | Alpha | Beta | Gamma | Daley | Epsilon |
|---------|-----------------------------|-------|------|-------|-------|---------|
| $n$     | <b>Seats from P/M</b>       | 1     | 12   | 10    | 58    | 19      |
| $v$     | <b>Share of PR Vote (%)</b> | 4.0   | 10.0 | 26.0  | 42.0  | 18.0    |
| $s$     | <b>Seats under PR</b>       | 8     | 20   | 52    | 84    | 36      |
| $s-n$   | <b>List Allocation</b>      | 7     | 8    | 42    | 26    | 17      |
| $s/200$ | <b>% Seats</b>              | 4.0   | 10.0 | 26.0  | 42.0  | 18.0    |

Fig. 6.2) A Mixed Member Proportional System Seat Allocation  
Source: Modified from Shugart & Wattenburg 2001

The fourth row is determined by multiplying the percentage of the total vote received by the number of seats to be determined (200) and dividing by 100. The fifth row, List Allocation, is the number of seats that a party would receive off of their list of candidates and it is the number of seats awarded through PR minus the seats awarded from the plurality or majority system ( $s-n$ ). The final row shows the percentage of seats each party is entitled to overall, which when done correctly will match up with the total share of the PR vote.

In this example, the Alpha party wins 7 list seats and 1 constituency seats (4%); Beta wins 8 list seats and 12 constituency seats (10%); Gamma wins 42 list seats and 10

constituency seats (26%); Daley wins 26 list seats and 58 constituency seats (42%); and Epsilon receives 17 list seats and 19 constituency seats (18%).

This example directly contrasts Fig 6.3, an example of seat allocation in a parallel system which does not take into account the seats distributed by constituency vote. Here, the same five parties are competing for 200 seats. The first and second rows are the exact same as in the example above showing the seats that each party would win from the constituency vote and the share of the proportional vote each party received.

|         | <b>Party</b>                | Alpha | Beta | Gamma | Daley | Epsilon |
|---------|-----------------------------|-------|------|-------|-------|---------|
| $n$     | <b>Seats from P/M</b>       | 1     | 12   | 10    | 58    | 19      |
| $v$     | <b>Share of PR Vote (%)</b> | 4.0   | 10.0 | 26.0  | 42.0  | 18.0    |
| $l$     | <b>List Allocation</b>      | 4     | 10   | 26    | 42    | 18      |
| $n + l$ | <b>Total Seats</b>          | 5     | 22   | 36    | 100   | 37      |
| $s/200$ | <b>% Seats</b>              | 2.5   | 11   | 18    | 50    | 18.5    |

Fig. 6.3) A Parallel System Seat Allocation  
Source: Modified from Shugart & Wattenburg 2001

Although the votes are the same, the difference between parallel and MMP systems is that one no longer has to subtract the constituency vote from the list vote to determine the proper list allocation. The proportion of votes a party receives is the number of seats they are allocated under the List system. The total number of seats each party receives is shown in the fifth row and the percentage overall is shown in the final row.

The allocation under the parallel system offers a few stark differences. The Alpha party lost three seats in our example and went from 4% to 2.5%. Beta fared a little better improving from 20 seats to 22 seats and from 10% to 11%, similar to the improvements

for party Epsilon. Gamma took a devastating loss of sixteen seats, all of which were gained by the Daley party which dominated the constituency vote.

### *6.2.1 The Japanese Greens – The Rainbow and Greens*

Although Japan has a constitutional monarchy, the Prime Minister and the *Diet*, the national legislature, hold most of the power. The *Diet* is a bicameral legislature that has the House of Representatives with 480 seats and four-year terms, and the House of Councilors, which has 242 seats and members are elected every three years (Ministry of Internal Affairs and Communications 2005). Of the members in the House of Representatives, 300 members are elected from single seat constituencies and the remaining 180 members are elected by proportional representation (Ministry of Internal Affairs and Communications 2005). In the House of Councilors, 144 are elected to represent the 47 districts and 98 are elected by PR (Ministry of Internal Affairs and Communications 2005).

Well-known for the Kyoto Protocol, Japan has been closely associated with the Green Movement. Japanese politics were dominated by the Liberal Democratic Party for decades but recent electoral changes suggest that Japan's political climate may be shifting (Global Greens 2001b). New social movements are emerging and for the first time women are making significant political advantages (Global Greens 2001b). In April 1999, the Japanese Green Party, The Rainbow and Greens, began to support candidates and ran for election with the slogan "changing politics from the provinces" (Global Greens 2001b). 133 of the 226 candidates were victorious, including the position of major of Hiroshima (Global Greens 2001b). In August of the same year The Rainbow

and Greens became an official organization (Global Greens 2001b). The party is structured into nine regional blocs that act independently yet still meet to discuss and share ideas (Global Greens 2001b). As of 2000, there were 138 Rainbows and Greens members who were aggressively trying to put green policy into action (Global Greens 2001b).

### 6.2.2 *The Greens of the Philippines*

One of the largest chains of islands in the Malay Archipelago has one of the smallest nations in terms of size of parliament. The Philippines is a Constitution-based republic that recently changed from a block vote to a parallel system. The upper chamber of the *Kongreso* or Congress is the Senate (*Senado*), which consists of 24 seats, each of whom serves a six-year term with half elected every three years (Government of the Philippines 2007, Country Studies US 2007). The House of Representatives (*Kapulungan Ng Mga Kinatawa*) has 214 seats and members are elected to serve three-year terms (Government of the Philippines 2007). The nation is divided into three large geographical areas (Luzon, Visayas, and Mindanao), which in turn are divided into a total of 17 regions, 81 provinces, 118 cities, 1,150 municipalities, and 41,995 barangays<sup>21</sup> (Government of the Philippines 2007).

Elections in the Philippines traditionally experience high voter turnout, often as high as 80-85% (Country Studies US 2007). In 1987 the system was revised and the Commission on Elections was created (Country Studies US 2007). Members of the Commission must be college educated, are frequently lawyers, and all are appointed by

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<sup>21</sup> The Barangay is the basic unit of the Philippine political system and the smallest political unit into which the municipalities are divided. A Barangay traditionally consists of less than 1,000 people and is headed by a barangay chairman or punong barangay. (<http://www.gov.ph/>).

the President to serve a single seven-year term (Country Studies US 2007). In the 1987 elections there were 79 separate parties that had registered with the Commission and over 1,900 people ran for the approximately 200 seats available (Country Studies US 2007). In the 1987 election there were 63 election-related killings. The following year saw almost 100 workers who were killed during the local elections and 39 candidates killed (Country Studies US 2007). Because of this violence, political parties were temporarily banned in 1989 by the Commission on Elections when barangay officials were elected (Country Studies US 2007).

During that time and since then, political parties have primarily served as non-ideological vehicles for personal ambition. Filipino parties tend to avoid taking positions and attempt to appeal to the entire electorate never truly addressing the problems of wealth distribution and social inequity (Country Studies US 2007). In spite of these obstacles, the Philippines actually do have a Green Party, the *Partido Kalikasan ng Pilipinas*, and the Philippine Greens<sup>22</sup>.

The Partido Kalikasan is among the newest Green Parties in the world, being founded in 2003. After deliberation the Partido Kalikasan adopted the principles of Ecological Integrity, Social Justice, National Solidarity, Active Non-Violence, Participatory Democracy, and Personal Integrity for their organization (Partido Kalikasan 2007). This group works closely with the Philippine Greens, a similar organization which was founded in 1990 (Ellorin 2007). Together they address the ecological needs of their nation and are in the process of merging together to form one solitary Green Party

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<sup>22</sup> Both of these parties exist in the organizational sense, but neither is officially registered with the Commission on Elections (<http://www.comelec.gov.ph/index.html>).

(Ellorin 2007). In 2004 the Partido Kalikasan offered Manuel Ravanera as a candidate in Cagayan de Oro (Ellorin 2007). In spite of their minimal resources, the Partido Kalikasan established themselves as a viable option, granting an alternative to the traditional politics (Ellorin 2007).

### *6.3 Single Non-Transferable Vote*

Used only in Vanuatu, Afghanistan, and Jordan (although historically associated with Japan who used it until 1994), the single non-transferable vote (SNTV) allows each voter to cast one vote (Blais and Massicotte 2002). However, unlike the SMP system, SNTV has multiple victors per district. Therefore the candidates who receive the highest number of votes are awarded seats until all seats have been filled. The proportionality of this system can be greatly affected by the district magnitude, the more members per district, the more proportional the system. SNTV is categorized as a semi-proportional system because it aids smaller parties but not to the extent of a pure PR system. In such a system the Greens have to be cautious because they must run enough candidates to appeal to voters, yet too many candidates can dilute the vote and none of them will win (Farrell 2001). Therefore offering surplus candidates is counterproductive and might lead to fewer being elected than if a smaller number of candidates ran.

Like all other systems, SNTV has its benefits and detriments. SNTV gives smaller parties a greater chance to succeed than plurality systems. Although this could lead to major fractions within the political system, Japan demonstrated a “one party dominant” system for much of the forty-five years it was used (Reynolds and Reilly1997). Unlike proportional systems with quotas the SNTV is easy to use and to allocate seats. A major drawback to this system is that the vote proportion required for a

candidate to win decreases as district magnitude increases. In a four-seat constituency if a voter can cast three votes, the proportion of the vote need is 42.9%; for two votes, the proportion is only 33.3%; for one vote (as is the case of SNTV) only 20 percent of the constituency vote is needed (Engstrom 1998, 232-233).

### *6.3.1 SNTV in Vanuatu*

After gaining independence in 1980, the tiny nation of Vanuatu found itself with two major political parties, one an Anglophone and the other a Francophone (“Politics” 2006). These parties soon splintered and in the 2004 elections there were 261 candidates from a variety of parties running for Parliament (“Politics” 2006). Vanuatu has a 52-member Parliament which is elected every 4 years and which then elects the President for a five-year term (Government of Vanuatu 2005). In any SNTV the proportionality can be adjusted by increasing the number of seats that can be allocated within a multi-member district (ACE Electoral Knowledge Network 2006). Vanuatu has seven members elected from each district, stretching the relationship of MP to constituent, but still trying to maximize proportionality (ACE Electoral Knowledge Network 2006). Of the three nations which use SNTV, only Vanuatu currently has a Green Party. As of the July 2004 elections, the *Confédération Verte* or Green Confederation won 3 seats.

### *6.3 Conclusion of Semi-Proportional Effects*

Semi-proportional systems are not recognized as a distinct group by some electoral system scholars (ACE Electoral Knowledge Network 2006, Farrell 2001), yet I find it difficult to not classify them in a separate category. Parallel systems closely mirror MMP systems, but the PR component is not used to reduce disproportionality (ACE Electoral Knowledge Network 2006). In other words, the seats gained by the

plurality or majority vote have no effect on the seats that are awarded via the List vote. Therefore parallel are proportional in the sense that they have a List component, but disproportional because they do not compensate for seats won in the non-List vote, making them semi-proportional at best.

SNTV is very similar to plurality systems, but it only applies to multi-member districts. SNTV is better equipped to increase the representation of women and minorities and as such should be easier for Green Parties to gain a place in government when compared to SMP systems. However, this is not necessarily the case. Of the three nations that use SNTV, only one of them currently has a Green Party.

## Chapter 7: Concluding Remarks

### 7.1 Political Consequences of Electoral Systems

### 7.2 Advantages and Disadvantages of Electoral Systems

### 7.3 Representation of Green Parties

#### *7.1 Political Consequences of Electoral Systems*

Electoral systems do matter. Electoral systems matter to the politicians who win and lose by the electoral rules. Electoral systems matter to the political parties that struggle to gain acceptance in a world that systematically denies them representation. Whether a party dies within few years or lasts for decades can be decided by their adaptation to the system in place. Electoral systems also matter to voters who have the chance to support candidates and parties that they feel best represent their wishes. As new nations were created at the fall of communism and as new democracies emerge around the world, politicians will continue to struggle with the electoral options that exist.

Following the work of Duverger, Blais and Massicotte offer a unique way to access electoral systems (Blais and Massicotte 2002). They look at what they call the mechanical and the psychological effects of electoral systems on voters. Mechanical effects are those that follow directly from the electoral rules (Blais and Massicotte 2002). Psychological effects stem from how parties, politicians, and voters react to the rules (Blais and Massicotte 2002). As such, psychological effects have the ability to change the way a person votes and mechanical effects are the results of the election.

An example of a psychological effect is the decision made by political parties and voters in SMP systems. As it is unlikely that newly emerging parties will be able to

overcome the better-established parties, there is a built-in discouragement of forming or voting for new parties. Another example was discovered by Katz (1997) who found that PR systems and large district magnitude lead to more ideologically-oriented parties. He notes that when candidates are able to choose between party members (open list) as opposed to pre-determined party lists where voters choose one party's list over another, there is less party cohesion (Katz 1997).

Duverger (1954) was one of the first to write about the mechanical effects of voting. His claim that plurality rule favors a two-party system and that proportional representation led to multi-partyism was proved basically correct by Riker (1986). Rae (1967) performed a regression analysis comparing vote shares to seat shares and found that all systems give an advantage to the stronger parties, but that the bias is far more pronounced in plurality and majority systems when compared to PR systems (Blais and Massicotte 2002). Yet even within PR systems there is a greater bias against smaller parties in largest remainder systems than in highest average systems (See Appendix B for further details).

It is the combination of mechanical effects and psychological effects that affect the likelihood of a Green Party emerging and surviving. As such, it is difficult to determine which system is the 'best' or 'worst' for Green Party success. Comparing the pros with the cons for each system will help us gain better understanding of how these electoral systems affect Greens.

### *7.2 Advantages and Disadvantages of Electoral Systems*

Overall each electoral system has its inherent advantages and disadvantages. The plurality system guarantees geographic representation and it makes representatives

accountable to their electorate. Plurality systems are lauded for their simplicity in voting and in allocating seats. Furthermore plurality systems promote a stable government because they frequently lead to majority governments. However, all of these benefits come at the cost of representation of minorities, women, and smaller parties including Green Parties. Also a large number of votes in any plurality system are actually wasted votes.

Majority systems also have the benefit of being easy to understand. They maintain strong constituency representation and lead to stable governments. The two-round system gives voters a second chance when making a choice and they can change their mind if they want to. Alternative voting offers voters a chance to make sure their vote is used because they rank-order their preferences. Furthermore, by requiring candidates to receive a majority of the votes there is an increased perception of legitimacy. Nevertheless, majority systems still suffer from disproportionality. In the case of two-round systems, the second ballot is an increased cost on the voters and the administration and the process takes longer. In alternative vote, the voter bears the high cost of learning about all of the candidates so that he or she can successfully rank them.

PR systems are better than plurality or majority systems at producing proportional results. There are far fewer votes wasted in PR systems which could theoretically lead to higher voter turnout. Katz (1997) looked at more than 800 elections from 75 different countries and determined that there are, on average, nine political parties in a PR system and six in plurality systems. Therefore, as PR systems frequently have more political parties in government, smaller parties, like the Greens, have a greater chance to win representation or possibly govern. However, PR systems make it difficult to hold elected

officials accountable for their actions. There is a weaker link between the candidate and his or her constituents. Also the fragmentation of political parties creates a need for coalition governments, and may lead to the inclusion of extremist parties in government.

MMP systems are often thought of as being the best of both worlds, but they also have their flaws. MMP is a very complicated system that can be difficult for voters to understand. It also allows for strategic voting to take place. But MMP does have high rates of proportionality and there is strong geographic representation. Also there are fewer wasted votes in MMP than in plurality or majoritarian systems.

Parallel systems manage to better represent minorities, but they may not lead to party fragmentation. However it is a complicated system and it does not guarantee proportionality. SNTV is more likely to increase the representation of women and minorities than plurality or majoritarian systems, but that is not always the case. Because equal representation cannot be guaranteed, these two systems are, at best, semi-proportional and are not likely to be the best route for Green Parties.

### *7.3 Representation of Green Parties*

By now it should be apparent that no one system is better for Green Parties than all the others for each electoral system has its flaws. Fig. 7.1a shows the actual frequency with which each electoral system is used. Fig. 7.1b shows the relative frequency of each electoral system as a proportion of all nations in this study. These charts show that List PR is by far the most common electoral system in use today and it can be found in 35% of the countries used in this study. Also shown is the relative infrequency of STV, SNTV, Party Block Vote, and Alternative Vote.

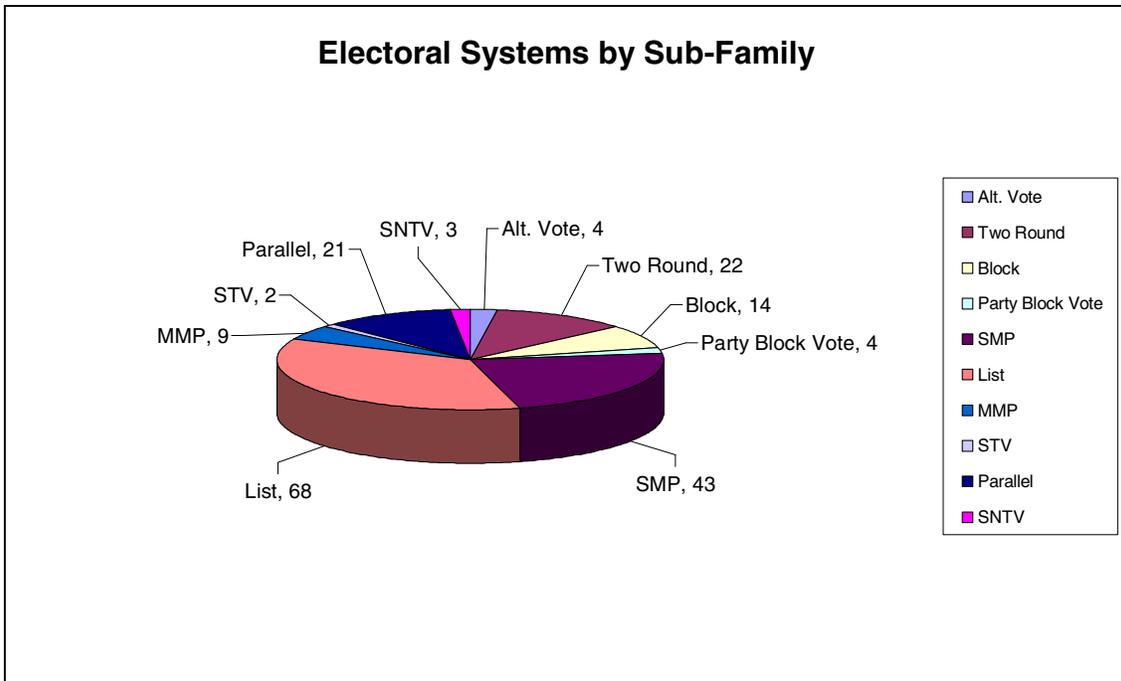


Fig. 7.1a) A pie chart of all electoral systems currently in use today as categorized by their sub-family. The number following each electoral system is the actual number of nations from this study that use the system.  
Source: International IDEA 2005

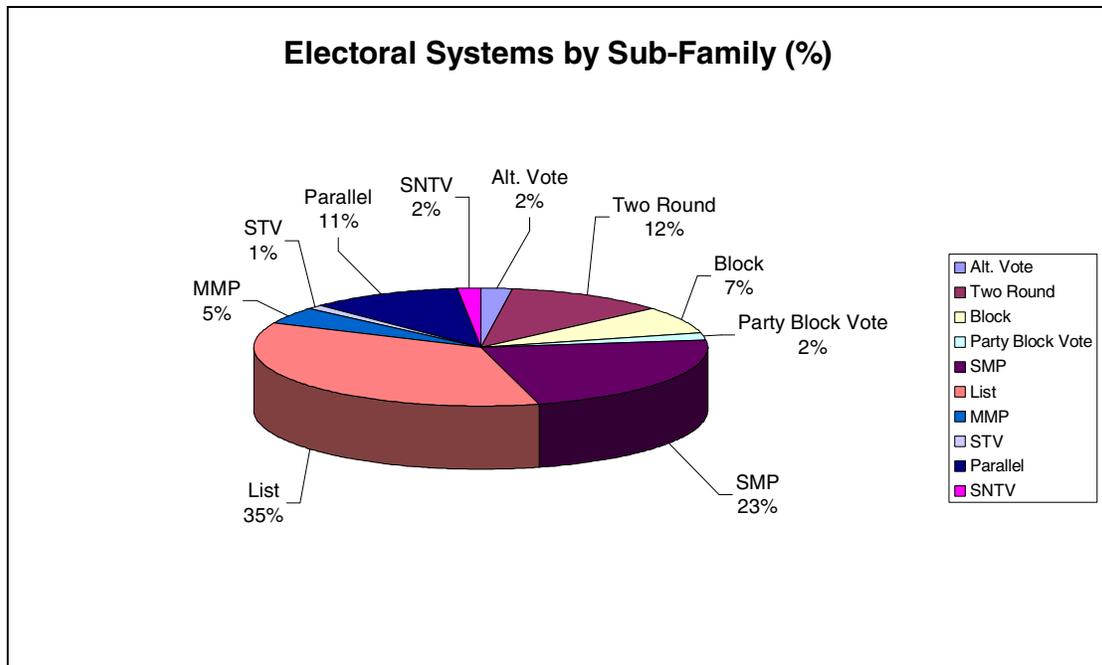


Fig. 7.1b) A pie chart of all electoral systems currently in use today as categorized by their sub-family. This chart shows the proportion of nations from this study that uses each electoral system.  
Source: International IDEA 2005

If List PR is so popular, or if MMP has so many intrinsic benefits, why don't all nations adopt them as the best method of allocating seats? As shown, with ten major electoral sub-system options to choose from it is quickly apparent that there are a number of 'best methods' that exist. What is right for one country is not always right for another. But what method is best for the Greens? Although Fig 7.1a and Fig. 7.1b show us a lot about which electoral systems are used, these charts do not show us much about the electoral systems in use by nations with Green Parties.

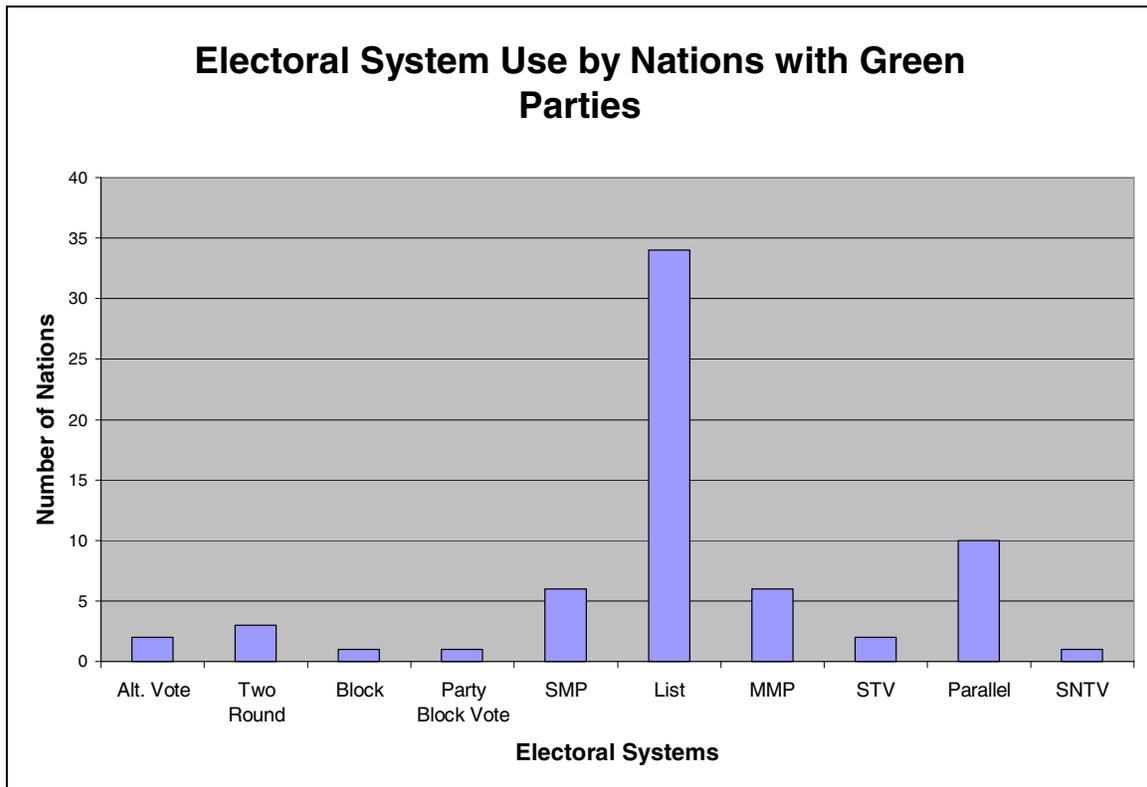


Fig 7.2) Electoral Systems Currently in Use in Nations that have Green Parties  
Source: International IDEA 2005

As demonstrated in Fig 7.2, the Greens have managed to emerge, survive, and in some cases thrive, under all forms of electoral systems. Greens currently appear to do the

best under List PR systems, but as Fig 7.1 showed, there are more List PR systems to begin with. Therefore, we must look at the percentage of nations that have Green Parties compared to their electoral system (See Fig 7.3).

| <b>Family</b> | <b>Sub-Family</b> | <b># of Nations</b> | <b># with Greens</b> | <b>Percentage</b> |
|---------------|-------------------|---------------------|----------------------|-------------------|
| Majority      | Alt. Vote         | 4                   | 2                    | 50.00             |
| Majority      | Two Round         | 22                  | 3                    | 13.64             |
| Plurality     | Block             | 14                  | 1                    | 7.14              |
| Plurality     | Party Block Vote  | 4                   | 1                    | 25.00             |
| Plurality     | SMP               | 43                  | 6                    | 13.95             |
| PR            | List              | 68                  | 34                   | 50.00             |
| PR            | MMP               | 9                   | 6                    | 66.67             |
| PR            | STV               | 2                   | 2                    | 100.00            |
| Semi-PR       | Parallel          | 21                  | 10                   | 47.62             |
| Semi-PR       | SNTV              | 3                   | 1                    | 33.33             |

Fig 7.3) The most frequently used electoral system in nations with Green Parties

After assessing this data, it becomes apparent that STV systems have a 100% rating when it comes to the formation of the Green Parties. However, this number should be mentioned with caution as there are only two cases to support it.

The only concluding remark that can be made with any certainty is that one is most likely to find a Green Party in a PR system (53.2%), then a Semi-PR (45.8%), trailed by Majority systems (19.2%) and Plurality systems (13.3%). Although not surprising, these results should give hope to Greens around the world as many nations abandon majority and plurality systems in favor of PR or Semi-PR systems.

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## Appendix A: Nations Used in this Study and Their Electoral System

The following is an alphabetical listing of all the nations used in this study divided by family and subfamily (first those with Greens then those without). If the nation currently has one or more Green Parties, then it is designated by an X in the final column.

| <b>Country</b>           | <b>Electoral System</b> | <b>Family</b> | <b>Greens?</b> |
|--------------------------|-------------------------|---------------|----------------|
| Australia                | Alt. Vote               | Majority      | X              |
| Papua New Guinea         | Alt. Vote               | Majority      | X              |
| Fiji                     | Alt. Vote               | Majority      |                |
| Nauru                    | Alt. Vote               | Majority      |                |
| France                   | Two Round               | Majority      | X              |
| Mali                     | Two Round               | Majority      | X              |
| Mongolia                 | Two Round               | Majority      | X              |
| Bahrain                  | Two Round               | Majority      |                |
| Belarus                  | Two Round               | Majority      |                |
| Central African Republic | Two Round               | Majority      |                |
| Comoros Islands          | Two Round               | Majority      |                |
| Cuba                     | Two Round               | Majority      |                |
| Egypt                    | Two Round               | Majority      |                |
| Gabon                    | Two Round               | Majority      |                |
| Haiti                    | Two Round               | Majority      |                |
| Iran                     | Two Round               | Majority      |                |
| Kiribati                 | Two Round               | Majority      |                |
| Korea (North)            | Two Round               | Majority      |                |
| Kyrgyzstan               | Two Round               | Majority      |                |
| Mauritania               | Two Round               | Majority      |                |
| Montserrat               | Two Round               | Majority      |                |
| Republic of Congo        | Two Round               | Majority      |                |
| Togo                     | Two Round               | Majority      |                |
| Turkmenistan             | Two Round               | Majority      |                |
| Uzbekistan               | Two Round               | Majority      |                |
| Vietnam                  | Two Round               | Majority      |                |
| Mauritius                | Block                   | Plurality     | X              |
| Cayman Islands           | Block                   | Plurality     |                |
| Falkland Islands         | Block                   | Plurality     |                |
| Guernsey (UK)            | Block                   | Plurality     |                |
| Isle of Man (UK)         | Block                   | Plurality     |                |
| Jersey (UK)              | Block                   | Plurality     |                |
| Kuwait                   | Block                   | Plurality     |                |
| Laos                     | Block                   | Plurality     |                |
| Lebanon                  | Block                   | Plurality     |                |
| Maldives                 | Block                   | Plurality     |                |
| Saint Helena             | Block                   | Plurality     |                |

| <b>Country</b>                   | <b>Electoral System</b> | <b>Family</b> | <b>Greens?</b> |
|----------------------------------|-------------------------|---------------|----------------|
| Syria                            | Block                   | Plurality     |                |
| Tonga                            | Block                   | Plurality     |                |
| Tuvalu                           | Block                   | Plurality     |                |
| Cameroon                         | Party Block Vote        | Plurality     | X              |
| Chad                             | Party Block Vote        | Plurality     |                |
| Djibouti                         | Party Block Vote        | Plurality     |                |
| Singapore                        | Party Block Vote        | Plurality     |                |
| Canada                           | SMP                     | Plurality     | X              |
| Kenya                            | SMP                     | Plurality     | X              |
| Nepal                            | SMP                     | Plurality     | X              |
| Nigeria                          | SMP                     | Plurality     | X              |
| United Kingdom                   | SMP                     | Plurality     | X              |
| United States of America         | SMP                     | Plurality     | X              |
| Antigua and Barbuda              | SMP                     | Plurality     |                |
| Bahamas                          | SMP                     | Plurality     |                |
| Bangladesh                       | SMP                     | Plurality     |                |
| Barbados                         | SMP                     | Plurality     |                |
| Belize                           | SMP                     | Plurality     |                |
| Bermuda                          | SMP                     | Plurality     |                |
| Botswana                         | SMP                     | Plurality     |                |
| Cook Islands (NZ)                | SMP                     | Plurality     |                |
| Dominica                         | SMP                     | Plurality     |                |
| Ethiopia                         | SMP                     | Plurality     |                |
| Gambia                           | SMP                     | Plurality     |                |
| Ghana                            | SMP                     | Plurality     |                |
| Grenada                          | SMP                     | Plurality     |                |
| India                            | SMP                     | Plurality     |                |
| Jamaica                          | SMP                     | Plurality     |                |
| Madagascar                       | SMP                     | Plurality     |                |
| Malawi                           | SMP                     | Plurality     |                |
| Malaysia                         | SMP                     | Plurality     |                |
| Niue (NZ)                        | SMP                     | Plurality     |                |
| Oman                             | SMP                     | Plurality     |                |
| Palau                            | SMP                     | Plurality     |                |
| Saint Kitty and Nevis            | SMP                     | Plurality     |                |
| Saint Lucia                      | SMP                     | Plurality     |                |
| Saint Vincent and the Grenadines | SMP                     | Plurality     |                |
| Samoa                            | SMP                     | Plurality     |                |
| Solomon Islands                  | SMP                     | Plurality     |                |
| Sudan                            | SMP                     | Plurality     |                |
| Swaziland                        | SMP                     | Plurality     |                |
| Tanzania                         | SMP                     | Plurality     |                |

| <b>Country</b>           | <b>Electoral System</b> | <b>Family</b> | <b>Greens?</b> |
|--------------------------|-------------------------|---------------|----------------|
| Trinidad and Tobago      | SMP                     | Plurality     |                |
| Turks and Caicos Islands | SMP                     | Plurality     |                |
| Uganda                   | SMP                     | Plurality     |                |
| Yemen                    | SMP                     | Plurality     |                |
| Zambia                   | SMP                     | Plurality     |                |
| Zimbabwe                 | SMP                     | Plurality     |                |
| Marshall Islands         | SMP                     | Plurality     |                |
| Austria                  | List                    | PR            | X              |
| Belgium                  | List                    | PR            | X              |
| Benin                    | List                    | PR            | X              |
| Brazil                   | List                    | PR            | X              |
| Bulgaria                 | List                    | PR            | X              |
| Burkina Faso             | List                    | PR            | X              |
| Chile                    | List                    | PR            | X              |
| Colombia                 | List                    | PR            | X              |
| Cyprus                   | List                    | PR            | X              |
| Czech Republic           | List                    | PR            | X              |
| Denmark                  | List                    | PR            | X              |
| Dominican Republic       | List                    | PR            | X              |
| Estonia                  | List                    | PR            | X              |
| Finland                  | List                    | PR            | X              |
| Greece                   | List                    | PR            | X              |
| Guinea-Bissau            | List                    | PR            | X              |
| Latvia                   | List                    | PR            | X              |
| Luxembourg               | List                    | PR            | X              |
| Morocco                  | List                    | PR            | X              |
| Netherlands              | List                    | PR            | X              |
| Nicaragua                | List                    | PR            | X              |
| Niger                    | List                    | PR            | X              |
| Norway                   | List                    | PR            | X              |
| Peru                     | List                    | PR            | X              |
| Poland                   | List                    | PR            | X              |
| Portugal                 | List                    | PR            | X              |
| Romania                  | List                    | PR            | X              |
| Slovakia                 | List                    | PR            | X              |
| South Africa             | List                    | PR            | X              |
| Spain                    | List                    | PR            | X              |
| Sri Lanka                | List                    | PR            | X              |
| Sweden                   | List                    | PR            | X              |
| Switzerland              | List                    | PR            | X              |
| Uruguay                  | List                    | PR            | X              |
| Moldova                  | List                    | PR            |                |
| Slovenia                 | List                    | PR            |                |

| Country                | Electoral System | Family | Greens? |
|------------------------|------------------|--------|---------|
| Algeria                | List             | PR     |         |
| Angola                 | List             | PR     |         |
| Argentina              | List             | PR     |         |
| Aruba (Netherlands)    | List             | PR     |         |
| Bosnia and Herzegovina | List             | PR     |         |
| Burundi                | List             | PR     |         |
| Cambodia               | List             | PR     |         |
| Cape Verde Islands     | List             | PR     |         |
| Costa Rica             | List             | PR     |         |
| Croatia                | List             | PR     |         |
| Ecuador                | List             | PR     |         |
| El Salvador            | List             | PR     |         |
| Equatorial Guinea      | List             | PR     |         |
| Guatemala              | List             | PR     |         |
| Guyana                 | List             | PR     |         |
| Honduras               | List             | PR     |         |
| Iceland                | List             | PR     |         |
| Indonesia              | List             | PR     |         |
| Iraq                   | List             | PR     |         |
| Israel                 | List             | PR     |         |
| Liechtenstein          | List             | PR     |         |
| Macedonia              | List             | PR     |         |
| Montenegro             | List             | PR     |         |
| Mozambique             | List             | PR     |         |
| Namibia                | List             | PR     |         |
| Panama                 | List             | PR     |         |
| Paraguay               | List             | PR     |         |
| Rwanda                 | List             | PR     |         |
| San Marino             | List             | PR     |         |
| Sao Tomé and Príncipe  | List             | PR     |         |
| Serbia                 | List             | PR     |         |
| Sierra Leone           | List             | PR     |         |
| Suriname               | List             | PR     |         |
| Turkey                 | List             | PR     |         |
| Germany                | MMP              | PR     | X       |
| Hungary                | MMP              | PR     | X       |
| Italy                  | MMP              | PR     | X       |
| Mexico                 | MMP              | PR     | X       |
| New Zealand            | MMP              | PR     | X       |
| Venezuela              | MMP              | PR     | X       |
| Albania                | MMP              | PR     |         |
| Bolivia                | MMP              | PR     |         |
| Lesotho                | MMP              | PR     |         |

| <b>Country</b>        | <b>Electoral System</b> | <b>Family</b> | <b>Greens?</b> |
|-----------------------|-------------------------|---------------|----------------|
| Ireland               | STV                     | PR            | X              |
| Malta                 | STV                     | PR            | X              |
| Georgia               | Parallel                | Semi-PR       | X              |
| Guinea                | Parallel                | Semi-PR       | X              |
| Japan                 | Parallel                | Semi-PR       | X              |
| Korea (South)         | Parallel                | Semi-PR       | X              |
| Pakistan              | Parallel                | Semi-PR       | X              |
| Philippines           | Parallel                | Semi-PR       | X              |
| Russia                | Parallel                | Semi-PR       | X              |
| Senegal               | Parallel                | Semi-PR       | X              |
| Taiwan                | Parallel                | Semi-PR       | X              |
| Ukraine               | Parallel                | Semi-PR       | X              |
| Andorra               | Parallel                | Semi-PR       |                |
| Armenia               | Parallel                | Semi-PR       |                |
| Azerbaijan            | Parallel                | Semi-PR       |                |
| Kazakhstan            | Parallel                | Semi-PR       |                |
| Lithuania             | Parallel                | Semi-PR       |                |
| Monaco                | Parallel                | Semi-PR       |                |
| Palestinian Authority | Parallel                | Semi-PR       |                |
| Seychelles            | Parallel                | Semi-PR       |                |
| Tajikistan            | Parallel                | Semi-PR       |                |
| Thailand              | Parallel                | Semi-PR       |                |
| Tunisia               | Parallel                | Semi-PR       |                |
| Vanuatu               | SNTV                    | Semi-PR       | X              |
| Afghanistan           | SNTV                    | Semi-PR       |                |
| Jordan                | SNTV                    | Semi-PR       |                |

Source: Much of this data comes from the International Institute for Democracy and Electoral Assistance (International IDEA 2005).

## Appendix B: Disproportionality between Hare and Droop Quotas

Previous Example of Hare and Droop Quota allocated to *five* seats:

|           | Total Votes | Seats Allocated | 2 <sup>nd</sup> Round (Remainder) | Seats Allocated | Total Seats Allocated |
|-----------|-------------|-----------------|-----------------------------------|-----------------|-----------------------|
| Jayhawks  | <b>328</b>  | 1 (1)           | 128                               | 1 (4)           | 2                     |
| Tigers    | <b>289</b>  | 1 (2)           | 89                                | 0               | 1                     |
| Wildcats  | <b>113</b>  | 0               | 113                               | 1 (5)           | 1                     |
| Buffalos  | <b>176</b>  | 0               | 176                               | 1 (3)           | 1                     |
| Longhorns | <b>94</b>   | 0               | 94                                | 0               | 0                     |

Hare Quota = 200

|           | Total Votes | Seats Allocated | 2 <sup>nd</sup> Round (Remainder) | Seats Allocated | Total Seats Allocated |
|-----------|-------------|-----------------|-----------------------------------|-----------------|-----------------------|
| Jayhawks  | <b>328</b>  | 1 (1)           | 161                               | 1 (4)           | 2                     |
| Tigers    | <b>289</b>  | 1 (2)           | 122                               | 1 (5)           | 2                     |
| Wildcats  | <b>113</b>  | 0               | 113                               | 0               | 0                     |
| Buffalos  | <b>176</b>  | 0               | 176                               | 1 (3)           | 1                     |
| Longhorns | <b>94</b>   | 0               | 94                                | 0               | 0                     |

Droop Quota = 167

Although the first round of seat allocation is the same, the difference appears in the second round. The Hare Quota gives two seats to the Jayhawks and one to each of the Tigers, Wildcats, and Buffalos. The Droop Quota gives two seats to both the Jayhawks and the Tigers and one to the Buffalos. The Wildcats receive a seat only under the Hare quota, not the Droop quota. This further demonstrates that lower quotas (in this case the Droop quota) lead to greater disproportionality.