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Abstract

Lani Guinier's proposals were neither radical nor undemocratic. In fact, cumulative voting is more efficient, democratic, and fair than the plurality rule single member district arrangement currently in use in most of the United States that Guinier's critics held up as the paragon of democracy. The importance of these qualities, especially to minorities in a pluralistic democracy, cannot be overstated. Efficient, democratic, and fair electoral systems prevent government from ignoring minority rights and interests by turning mere enfranchisement into empowerment, which in turn, affords minorities the same access to and proportionate power in America's social, economic, and political institutions.

Josh Yount '95 is a political science and economics double major who graduated after this year's short-term. Josh wrote this paper as a combination of the senior projects he did in political science and economics. On campus Josh was very active in Student Senate.

Cumulative Voting and Single Member Districts in Industrial Organization

by Joshua Yount

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. (Holcombe 1994, p. 386)

J.M. Keynes

I am inclined to believe that monopoly and other imperfections are at least as important, and perhaps substantially more so, in the political sector as in the market place. (Becker 1976, p. 37)

G. Becker

I. INTRODUCTION

In 1993 Bill Clinton nominated Lani Guinier to head the civil rights division of the Department of Justice. Soon after, Guinier's nomination became embroiled in controversy when the media and conservative legislators began to examine her writings on electoral

remedies to Voting Rights Act violations. Almost immediately, Lani Guinier became known as the "quota queen" and her writings were derided as undemocratic and racially preferential. Still smarting from "nanny-gate," President Clinton quickly moved to avoid further attacks and withdrew Guinier's nomination. Foremost among the charges raised against Guinier was that her advocacy of cumulative voting as an alternative to districting as a remedy for minority voting strength dilution represented an affront to democracy and was designed to unfairly advantage minorities. Unfortunately, the truth was somehow lost in the fury of political maneuvering and press sensationalism.

Lani Guinier's proposals were neither radical nor undemocratic. In fact, cumulative voting is more efficient, democratic, and fair than the plurality rule single member district arrangement currently in use in most of the United States that Guinier's critics held up as the paragon of democracy. The importance of these qualities, especially to minorities in a pluralistic democracy, cannot be overstated. Efficient, democratic, and fair electoral systems prevent government from ignoring minority rights and interests by turning mere enfranchisement into empowerment, which in turn, affords minorities the same access to and proportionate power in America's social, economic, and political institutions.

Evidence to support the claimed superiority of cumulative voting can be found in the literature on voting theory, comparative politics, public choice, and voting rights, but this study will focus on a relatively unexplored approach to electoral systems. Single member district, plurality rule will be compared to cumulative voting within the industrial organization paradigm, in order to examine each system's effect on competition, consumer choice, and democratic fairness. It will be argued that cumulative voting better reflects

consumer preferences and demand, induces more and better competition in elections, and prevents majority "monopolization" of the political process. As the United States and other nations begin to recognize the pluralistic nature of their societies, and as new nations embrace democracy and individual liberty, cumulative voting is an alternative that should be, and increasingly is, considered for use. Therefore, this study is important in that it sheds light on cumulative voting and adds to the evidence supporting the system's use.

First, voting in general will be analyzed and evaluated to assess the importance of different systems. Then, cumulative voting and single member district plurality rule will each be described and evaluated to provide an understanding of the qualities of each system. Next, the study will proceed to its central focus, evaluating both electoral systems within the industrial organization paradigm to determine each system's effect on competition, representation, and fairness. Finally, the evidence surrounding cumulative voting and single member districts generated by a review of the real world uses of cumulative voting will be examined.

As the U.S. and other nations begin to recognize the pluralistic nature of their societies, and as new nations embrace democracy and liberty, cumulative voting is an alternative that should be...considered for use.

II. VOTING SYSTEMS REALLY MATTER

Voting systems generally have three phases that are open to variation; balloting, districting, and electoral formula (Rae 1967). Balloting is the "specification of the voter's role in deciding the election" (Rae 1967, p. 16). In other words, balloting instructs the voter how to vote in terms of the number of votes cast, the way the votes can be arranged, and whether voters vote for parties or candidates. Districting produces "the units within which voting returns are translated into distributions of parliamentary seats" (Rae 1967, p. 19). The importance of the districting process is that the magnitude of districts, or number of seats per electoral unit, determines the degree of proportionality of representation from the district (Rae 1967, p. 20). Electoral formulae provide the method of translating votes into outcomes, in essence deciding who won and who lost. There are primarily two types of formula in use,[1] the plurality rule, and proportional representation (PR). The plurality system elects the person or party with the most votes, regardless of what portion of the total that is, as the only winner from a field of candidates. Proportional representation, conversely, elects multiple candidates or parties according to their proportional strength in the electorate and the percentage needed to gain a seat. One additional concept supplies a fourth basis of differentiation among electoral systems. The exclusion threshold is the percentage of votes needed to assure victory, although victory may be won with a lower amount. It is a function of the number of seats available in an election,[2] the more seats available the lower the exclusion threshold (Still 1992; Guinier 1994). Because different concepts, approaches, and combinations of approaches can be used in each phase of an

electoral system there is no limit on the number of possible electoral systems.

The fact that in practice there are so many different electoral schemes is not without reason. All three phases of an electoral system have an effect on the outcome of an election, thus different electoral systems that alter different phases of the process will cause different outcomes. In other words, electoral systems are not merely perfect mirrors that reflect voter preferences as electoral outcomes without affecting that outcome. The type of mirror used has a profound effect on how voter preferences are reflected (Lakeman 1974, p. 29; Rae 1967; Arrow 1963; Guinier 1994).

The fact that this is true is borne out by the contentious arguments that surround decisions about how officials will be elected. For instance, in the American south, the entire history of electoral law since the civil war is based on attempts by one faction or another to control local government. Between the 1870's and the 1960's whites instituted electoral "reforms" that in addition to effectively disenfranchising blacks, made it impossible for minority candidates to be elected. Since the 1960's minority interests through the federal government have manipulated electoral systems to guarantee a more egalitarian distribution of representation. Systemic matter.

A. SINGLE MEMBER DISTRICTS (SMD)

The most common electoral system in the United States is the single member district with plurality rule. In terms of the three phases introduced above, SMD plurality rule specifies procedures for each. In the balloting phase, the voter is presented with a series of candidates and is asked to cast a vote for one. Districting in this system divides a geopolitical entity in which an election is taking place into equally

populated districts,[3] equivalent in number to the quantity of seats available in the elected body.[4] Then the electoral formula, plurality rule, designates the one candidate in each district with the most votes as the winner. In addition, the exclusion threshold would be 50%, therefore requiring a candidate to receive half the electorates votes to be guaranteed victory. For example, SMD would divide a state with a 35 person legislature into 35 equally populated districts, from which voters, casting one vote a piece, would elect the top vote-getter from each district.

Single member district plurality rule is the form that all congressional and almost all state legislative elections take. Also, though not as frequently, SMD is used for local and municipal elections. Its popularity today has two sources. The first is tradition. SMD originated in England during feudal times as the way the fiefdoms were represented to the King. Each feudal estate had a representative, thus it was the land that was the basis for representation. This system evolved, and with the addition of a representative for each medieval town, paved the way for the British Parliament. American colonists, in turn, adopted it from the British and made this system the foundation of their new republic (Guinier 1994). Recently, however, SMD has come into even greater use as corrective strategy to combat at first Southern, but later nationwide, attempts to prevent minorities from having electoral power. By replacing at-large electoral systems that commonly dilute minority voting strength with SMD that takes advantage of geographic segregation to give minorities more control over their representatives, governments have taken a step to grant effective representation to groups that had previously been denied (Grofman et al 1982; Davidson and Korb 1984).

The widespread use of the single member district plurality rule system results from some

particularly beneficial qualities that the system possesses in terms of representation and governance. SMD's strongest trait is its ability to represent the geographical groups within a geopolitical area. This quality is thought to foster many other important goals of a "fair" electoral system. First, the narrowed jurisdiction of single member districts, as opposed to a simple at large system, allows and encourages constituencies to become more active in supporting candidates because of the head to head nature of the election and the increased worth of a voter's vote. Second, a representative of a district is more likely to share the feelings of his/her constituency because representative's election depends only on the district's perception of him/her, rather than the entire geopolitical unit. Also, the representative is likely to reside in the district and thus will tend to share many of the constituent preferences. Finally, the representative will seem to be more accessible to constituents who can geographically identify the person who specifically represents them (Weaver 1984).

In addition to the geopolitical benefits of SMD, stable two party governance is a consequence of the winner-take-all nature of plurality rule, which awards sole political representation of an entire district to the plurality winner, no matter how fractured the electorate is. In other words, a SMD plurality system tends to promote stability by not reflecting many of the divisions within the electorate. A third area of benefit comes in terms of minority representation, which can be aided through the geographic clustering of minorities that frequently occurs due to voluntary and involuntary segregation. Districts drawn to reflect this clustering will provide minorities with opportunities to elect their own representatives that may not have existed in an at-large system. The enforcement

of the Voting Rights Act by the Federal government through the use of SMD to correct minority vote dilution reflects this beneficial trait (Weaver 1984; Grofman et al 1982; Guinier 1994).

On the other hand, SMD suffers from some shortcomings as well. One source of problems is the flipside of the geopolitical benefits discussed above. Close ties between representatives and constituents also have the negative effects of producing representatives with overly parochial concerns and allowing obscure district politics to go unscrutinized. Even more fundamentally, however, creating geographic districts is well suited as strategy to extend representation only to the extent that interests are predominantly geographic. Although this may have been true at one time, geography is no more determinative of political preferences than race, gender, or income today. In addition, the arbitrariness of creating districts, within a geopolitical entity leads to gerrymandering and the dismantling of smaller geopolitical entities in the name of party politics so that districts describe only a geographic area rather than any cohesive community (Weaver 1984; Guinier. 1994; Note 1982).

It is completely unproductive from a social standpoint to perpetuate segregation by creating electoral structures that increase disincentives to integrate America's geopolitical entities.

SMD makes two crucial, yet not completely accurate or helpful assumptions.

First, it is assumed that geography is a proxy for racial or ethnic minorities, and second that race or ethnicity is a proxy for political preferences that are being privileged. Racial and ethnic minorities are not always geographically segregated, Latinos in the Southwest are an example. Nor do all voters within a particular minority have the political leanings that are projected on them as a group. Therefore, single member districting is a weak strategy for improving minority representation. Furthermore, it is completely unproductive from a social justice standpoint to perpetuate segregation by creating electoral structures that increase disincentives to integrate America's geopolitical entities (Guinier 1994; Cole, Taebel, and Engstrom 1987; Note 1982).

In addition, single member districting can be and has been used to dilute minority voting strength in the same way it is used to dilute majority political monopolization. This is exactly how the majority monopolizes the political system in the first place. Furthermore, because the entire concept of districting to create certain majorities necessarily creates other minorities, at least one group's voting strength is arbitrarily being diluted when a district is created to combat the vote dilution facing another group. In the face of this, even a government concerned with fairness would have to choose which groups have the right to representation and in what amounts.[5] Also, the stable two party government resulting from winner-take-all plurality rule prevents any third party from reinvigorating the political process, denies minorities, broadly defined, a voice in their representation, over represents the majority,[6] and wastes the votes of at least half the electorate.[7] (Weaver 1984; Grofman et al 1982; Still 1984; Guinier 1994; Note 1982).

B. CUMULATIVE VOTING (CV)

Cumulative voting is a semi-proportional electoral system combining aspects of plurality and proportional systems. In the balloting phase each voter is given a quantity of votes equal to the number of seats available within their district. Voters are then able to distribute their votes among the candidates in any way they wish, including placing multiple votes on individual candidates. For example, in a district with three seats up for election, a voter may place one vote on each of three candidates, or may place two votes on one candidate and one on another, or may place all three votes on one candidate.[8] Districting varies with CV, it could leave the geopolitical entity intact, thereby placing all voters in the same district, or it could divide the electorate into districts. When CV creates multiple districts, they are usually identifiable geopolitical subdivisions and do not necessarily have to be equally populated, because the seats available are apportioned to the districts according to population. By way of example, Lani Guinier suggests that if CV were used in New York City, the city could be divided into its five boroughs and each borough would have a quantity of city council seats proportionate to their respective populations (Guinier 1994, p. 155).

The electoral formula in CV is semi-proportional in that it elects more than one candidate, and thus is not "winner-take-all," and yet does not allocate seats in strict proportion to votes, but rather grants one seat to each of the winners, no matter how many votes they get. For instance, in a three seat race, the top three vote-getters in the election would each win a seat, even if the first place winner had twice as many votes as the second or third place winners. The exclusion threshold for this system is almost inversely proportional to the number of seats available. With five open seats, the exclusion threshold is 1/6 or 16.7%, thus requiring a

candidate to garner only little less than 17% to be guaranteed victory (Guinier 1994; Lakeman 1974, pp. 87-90; Still 1984).

CV traces its roots to the Victorian age when the modern world began to overtake tradition, especially in the political realm. CV was part of a larger reform movement throughout Great Britain that wanted to open government up to the common people and minorities. South Africa, England, and the State of Illinois all experimented with it to counteract potentially disruptive and tyrannous majority minority divisions, but the system never really caught on in any meaningful way. Although CV was never widely used, it has retained a following, and recently has been looked at more closely, as pluralist nations search for ways to give minorities a better chance to elect candidates (Lakeman 1974, pp. 87-90; Everson et al 1982; Guinier 1994).

Cumulative voting is appealing for a number of reasons. The fact that it is not winner-take-all, but rather sends several representatives to the legislature has a number of beneficial effects. First, there are less wasted votes because more voters voted for a winner. As a consequence of this, more individuals have a representative in the legislature. Finally, the existence of multiple open seats creates a low exclusion threshold that can prevent groups from being excluded from governing and encourages more candidates, as well as a larger variety of candidates to run for office.

CV also improves the electoral prospects for minority voters, both narrowly and broadly defined. First, not having to rely on geography allows minority voting power to be felt even when that minority is not residentially segregated. Second, the elimination of race districting allows minorities to seek out cross-cultural alliances with sympathizers who may have been submerged in a majority district

otherwise. This points to possibly the most beneficial aspect of cumulative voting, its facilitation of voluntary "districting." Throughout a geopolitical unit[9] in which CV is being used voters of similar interests can form "voluntary constituencies" based solely on their individual views rather than their geographic location or race. This allows government to stay out of the business of making assumptions about preferences, eliminates the need to perpetuate segregation, and induces voter participation among those formerly in "safe" districts.

CV also ensures that those with the same views who now have their votes together, will not have those votes unfairly diluted in an at-large system. By allowing voters to express the intensity of their preference by cumulating their votes, those who have strong preferences, even if they are small in number, can be heard in the political process. Furthermore, CV reduces the politicking involved in drawing and redrawing district lines and picking which group is the majority in each district because the extent of CV jurisdiction is defined by natural geopolitical

By allowing voters to express the intensity of their preference by cumulating their votes, those who have strong preferences...can be heard in the political process.

divisions. Finally, CV causes the legislative body to be more proportionally representative

of the electorate, and therefore a more true reflection of the voters (Guinier 1994; Note 1982; Weaver 1984; Still 1992; Everson et al 1982).

Cumulative voting also has drawbacks, however. Because it is more proportional, CV tends to be less stable as various groups battle for control. Furthermore, the procedures involved with CV can be confusing and not all voters understand them, which can lead to an inaccurate vote. In addition, the fact that no representative is formally bound to a defined constituency could lead to a distance between voters and legislators that would be detrimental. Finally CV can entail major use of strategy by parties, candidates, and voters. Parties fully want to exploit their strength, but if too many of their candidates are competing, all their candidates could suffer. Candidates have to deal with these same issues when deciding to enter and if they want to support other candidates. Voters, who generally want to balance their votes between those candidates they most prefer, and those that they like, who need their vote the most, have strategic problems in CV elections as well (Note 1982; Weaver 1984; Everson et al 1982).

C. GOVERNMENT AS MONOPOLY

Because government is the only producer of political and policy outputs, and there can only be one government per market (national, state, local) at a time, government can be conceived of as a natural monopoly^[10] (Tullock 1955, pp. 458-9). The concept is so common sense that government is not frequently thought of in these terms. For instance, the Bloomington city council has a monopoly on producing city ordinances, regulations, policies, expenditures, and certain services. An analysis of government within the industrial organization paradigm can provide

some valuable insights into the role of electoral systems (Holcombe, 1994).

Just as society faces alternatives in dealing with natural monopolies in industry, it must also decide how to treat the sovereign monopoly. Tullock cites three common approaches; laissez-faire non-control, regulation, and public ownership (1955, p. 458). A hands off approach gives government the kind unacceptable free reign that has not been seen since the fall of the divine monarchies. In addition it allows possessors of the monopoly rights to erect insurmountable barriers to entry. Public ownership surely exists, but it is public operation that is lacking. And in view of Arrow's impossibility theorem,^[11] the inevitability of self-interest in representation, and the massive costs of direct democracy, public operation is unlikely. Regulation is also unacceptable because of the undemocratic control it would necessitate. Although the Constitution, the Bill of Rights, and the common law all are examples of useful, and essential regulatory schemes designed to control government monopoly, regulation of this type over every aspect of governmental action is unwarranted because it would completely insulate government from "consumer sovereignty" (Holcombe 1994, p. 146; Tullock 1955, p. 459). Consequently, another scheme must be relied on to restrain government monopoly power.

From a market point of view, the best strategy would be to reduce the height of the entry barriers that allow monopolies to fight off challengers. Regular, competitive, democratic auctions of the publicly owned government's monopoly rights serve this function well. Candidates and parties bid for votes with promises of policy measures. Demetsz suggests this type of competition will eat away any monopoly profits (Holcombe 1994, pp. 146-7), and make government a reflection of popular sentiment. This analysis is

flawed however because it assumes perfect competition for the monopoly rights of government.

1. Competition for government monopoly

Non-competitive aspects of the electoral process have two sources; the status quo owner of monopoly rights, and the electoral system itself. Because governments, or majorities in democratic nations, have almost unlimited monopoly power, government officials who want to continue to earn the benefits of monopoly power[12], will use those powers to help maintain their position. Examples of this type of behavior in the American political system abound. The seniority system in Congress gives voters incentive to keep re-electing their representative so that he/she can provide better pork to the district. Also campaign financing, franking privilege, and media coverage are all manipulated in favor of sitting legislators (Holcombe 1994, p. 98). The degree to which American legislators can advantage themselves is fortunately limited by the competition introduced by the monopoly regulation found in the Constitutional commands placed on government (free press, free speech, regular elections, separation of powers, federalism) (Holcombe 1994, pp. 146-7).

Perhaps the greatest determinant of competition is a very subtle one in American politics, the electoral system. As was said above, the system matters. Likewise, different electoral systems can have quite different impacts on a political race. Certainly, the voting system employed contributes significantly to the number and quality of competitors and potential competitors by placing barriers on the quantity and positioning of competitors. Furthermore, candidate

behavior will be different because electoral strategies are system specific (Greenberg and Shepsle, 1987). Also, government will accurately reflect citizen preferences to varying degrees in different systems because some systems do better at transforming preferences into outcomes. Consequently, higher quality competition will occur when a community's political divisions are clearly expressed.

Within the industrial organization paradigm, single member district plurality rule and cumulative voting can be seen as market structures in the market that determines who will govern. The market is the geopolitical voting unit, the firms are the various candidates, the good that is being offered is government policy, and the consumers are the electorate. Thus in each election, in each geopolitical unit, candidates design and offer their product in hopes of attracting voters, because the candidate(s) with the largest "market share" on election day will win the election. As described above, the elements of competition will vary among systems. It will be posited that SMD, because of the type of competition it engenders, is an oligopolistic market structure. Likewise, the competition involved in CV makes it a monopolistically competitive structure.

2. SMD as Oligopoly

An oligopoly exists in an industry when a small number of firms dominate the market. Similarly, a political oligopoly can be said to be present in the political market for the government's monopoly powers when a few candidates and or parties dominate the electoral process. Certainly the two-party dominated history of elections in the U.S. under SMD plurality rule makes a prima facie case for the existence of an oligopoly. There is

evidence, however, that oligopolies are inherent in single member plurality electoral systems. Douglas Rae in his examination of electoral laws finds a "very strong relationship" between plurality electoral systems and two party system (1967, p. 95). Likewise, Duverger's Law claims that the "plurality method, by discriminating against small parties, encourages a two-party system" (Lijphart and Grofman 1984, p. 5).

Further evidence of the oligopolies nature of the American system can be found in manifestations of market power and the existence of entry barriers. The Median Voter Model hypothesizes that in plurality single winner elections, where issues are one dimensional and voter's preferences are single peaked, the candidate who has the support of the median voter will win. Because candidates in plurality elections attempt to maximize votes, in positioning their candidacy they will tend toward the median voter (Nicholson, 1992, p. 783; Downs, 1957, pp. 139-41). This effect tends to push candidates ideologically and policy-wise together. In this sense the political oligopoly model mirrors the kinked demand model of oligopoly because candidates have a disincentive to change their platforms in any direction when they are at the equilibrium median voter position, just as firms will tend not to move from the kink in their demand curves. Another similarity of the convergence tendency is the Hotelling's principle of minimum differentiation which predicts competitors imitate each other, thus producing a standardized product (Shepsle and Cohen 1990, p. 17).

Still many scholars have discovered shortcomings of the Median Voter Model in plurality elections. First, an election with more than two candidates will not produce convergence (Shepsle and Cohen 1990; Grofman 1993; Cox 1987). In addition, potential competition will prevent convergence

in a two candidate race (Shepsle and Cohen 1990, 28-29). These nonconvergence effects are militated against by the oligopolistic nature of SMD plurality rule, however. First, as discussed above, pluralities tend toward two competitor races, thus reducing the possibility of a multiple candidate race. Furthermore, an oligopoly's collusive tendencies preempt the introduction of other candidates, as the two candidates move apart on an ideological scale so as to prevent candidate entry on their ideological flanks.[13] This may reduce the threat of a multiple candidate race, but it does not eliminate the possibility that a new competitor could quickly enter and replace an old competitor.[14]

In the face of this possibility, the oligopoly must resort to entry barriers to reduce the residual threat of competition. These take at least three forms. The institutional barriers that the status quo government erects not only protect government monopoly power, but also preserve oligopolistic competition for that power through the electoral rules that are established. Also, the exclusion threshold of plurality rule is quite high at 50%, thus providing a disincentive for third candidate competition. Finally, districting can reduce competition in two ways. It limits competition by making smaller the jurisdiction that elects a representative. In addition, the arbitrary nature of the districting tool allows and, in fact, encourages the creation of "safe districts", or the use of "vote dilution", which are designed solely to undermine competition. Any remaining distance between the median voter and the positions taken by candidates to prevent entry, is lost in the candidates' intentional ambiguity which allows them to simultaneously converge on the median voter and appear to "hold down the fort." As Downs says, "...parties will try to be similar and equivocate" (1965, p. 137). In these ways oligopoly market power is used to reduce

competitiveness, while at the same time eliminate differentiation.

3. CV as Monopolistic Competition

Cumulative voting approximates monopolistic competition in form and function. Like a monopolistically competitive industry, CV invariably has quite a few candidates, and the candidates are differentiated. Also, cumulative voting engenders vigorous competition, in which candidates try to carve out a niche to remain successful, just as firms do in the market. The two distinguishing characteristics of cumulative voting in the monopolistic competition paradigm are competition and differentiation.

Because cumulative voting has more than one seat at stake in an election, typically more candidates will compete for office, thus making elections more competitive. The cumulative aspect of the process, in which voters are able to "plump"[15] votes, allows a certain degree of preference intensity revelation. The introduction of cardinal preferences into the electoral market makes demand as expressed in vote totals more reflective of the "true demand" of a pluralistic political society, and therefore more competitive (Cole, Taebel, and Engstrom, 1990). Also, cumulative voting has relatively low entry barriers, causing real and potential competition to increase. Foremost among these is its low exclusion threshold. Institutional barriers will also be lower to the degree that a more differentiated government monopoly will face higher marginal costs in producing legislation, thus will be unable to pass restrictive rules (Crain, Holcombe, and Tollison, 1979). In addition, the preservation of natural political boundaries eliminates the barrier erected by arbitrary apportionment.

Finally, the tendency away from stable two party competition will reduce the possibility of political collusion that prevents third parties from effectively entering the process and will diminish the institutionalized political party barriers.

Differentiation will occur in a cumulative voting system because there is no presumption of two party or two candidate competition, thus Cox's formulation that multiple candidate races will not converge holds (1987). In fact, "the Eaton-Lipsey analysis demonstrates the limited generalizability of Hotelling's Principle of Minimum Differentiation," thus firms in multiple candidate races, "... need not collectively confront the consumer with 'an

Because CV has more than one seat at stake in an election, typically more candidates will compete for office, thus making elections more competitive.

excessive sameness." (Shepsle and Cohen 1990, p. 20). This analysis predicts that competitors will spread out along the policy continuum, rather than bunching at the median position.

IV. EVIDENCE

Since its inception, cumulative voting has primarily been seen as a practical and fair way to vote in jurisdiction that cannot agree to a voting procedure because of the fear of factionalism or majority tyranny. In its first real-world usages, on the local level in parts of

England and in South Africa during the last third of the nineteenth century, its results were generally favorable, allowing minorities to be represented and reducing factionalism (Lakeman 1974, pp. 87-90). The most sustained usage of cumulative voting is found in Illinois where the system was used to elect the lower body of the legislature between 1870 and 1980. Originally instituted to mitigate the geopolitical polarization of the state into a pro-union Republican northern half and an anti-union Democratic southern half following the civil war, CV was designed to address "the injustice and inequalities of majority rule" (Everson et al 1982, p. 5). The system "worked" in that it allowed the second party in each half of the state to have representation. Many of the theories about CV are also confirmed by the Illinois experience. Cumulative voting did provide more proportional representation, did not overrepresent the majority, and increased the role of the minority in governing. The complaints about the Illinois experience, as to its non-competitiveness and lack of candidates, are not related to CV itself but rather are a function of the strong party control and collusion of the political process, and thus can be dismissed. Furthermore, the reasons for the systems repeal in 1980 were connected to voter anger over a pay increase, rather than substantive complaints about the system itself. The conclusion reached by many scholars is that CV in Illinois did "prevent the tyranny of an overwhelming majority" (Everson et al 1982; Kuklinski 1973). The long use of cumulative voting by corporations to elect boards of directors further attests to the usefulness of the system as a better way to represent an electorate (Guinier 1994, Note 1982).

The most recent uses of CV have come in response to violations of the Voting Rights Act's prohibition against minority vote

dilution. In Alamogordo, New Mexico, where Latinos and Blacks have seen their votes diluted and the lack of geographic segregation prevents effective districting, CV is being employed to ensure better minority representation. The institution of the system resulted in a Latino woman being elected at-large in the first election, mostly on the strength of Latino voters (Cole, Taebel, and Engstrom 1990). Likewise, a school district in South Dakota has seen positive results, in terms of Native American representation, by changing to cumulative voting (Engstrom and Barrilleaux, 1991). Finally, some Alabama localities, including Chilton County, have experimented with cumulative voting to increase black representation. Surprisingly, not only did black representation jump after the institution of this system, but the Republicans, another under-represented group in rural Alabama, also increased their representation (Still, 1992). Together, the evidence of cumulative voting usage indicates that it is an effective tool for improving minority representation.

V. CONCLUSION

This study of cumulative voting and single member district plurality rule attempted to use a novel application of industrial organization economic theory to explain why cumulative voting is a superior electoral system. The industrial organization paradigm, by providing concepts, such as oligopoly, monopolistic competition, and entry barriers, lends further insight into the advantages of cumulative voting, in terms of competition, representation, and fairness. By positing SMD plurality rule as an oligopolistic political market structure and CV as monopolistically competitive one, it was determined that CV was more competitive, representative, and fair, as an electoral system. This conclusion was buffeted by many

theoretical arguments coming from the literature surrounding voting rights, public choice, and voting theory. Furthermore, the field research done on actual instances of cumulative voting usage also lends credence to the conclusions drawn. Certainly further empirical research is needed concerning cumulative voting, and as more localities become more familiar with CV, the evidence surrounding its real world effects will improve. But, policy implications can be drawn from this preliminary study.

Cumulative voting should be considered as a viable electoral strategy for all types and levels of elections that simultaneously elect multiple candidates. This would as a whole improve American elections, in terms of representation, competition, and fairness, three qualities that are essential to a well functioning democracy. This recommendation can be taken further for those localities that are experiencing destructive factionalism or minority exclusion and majority dominance. Simply put, cumulative voting should be instituted as soon as possible in these areas because although not a panacea, it certainly has proved useful in equitably easing the tensions that arise in those situations. As the United States moves toward a more integrated, culturally diverse future, cumulative voting should prove to be an integral part of the American electoral system.

REFERENCES

- Arrow, Kenneth J.** Social Choice and Individual Values. 2nd ed. New York: Wiley, 1963.
- Becker, Gary.** The Economic Approach to Human Behavior. Chicago: U. of Chicago Press, 1976.
- Brennan, Geoffrey, and Loren Lomasky.** Democracy and Decision. Cambridge, UK: Cambridge U. Press, 1993.
- Cole, Richard L., Delbert A. Taebel, and Richard L. Engstrom.** "Cumulative Voting in a Municipal Election: A Note on Voter Reactions and Electoral Consequences." Western Political Quarterly 43, 1990: pp. 191-9.
- Cox, Gary.** "Electoral Equilibrium Under Alternative Voting Institutions." American Journal of Political Science 31, 1987: pp. 82-102.
- Crain, W. Mark, Randall Holcombe, and Robert Tollison.** "Monopoly Aspects of Political Parties." Atlantic Economic Journal 7.2, 1979: pp. 54-8.
- Davidson, Chandler, and George Korbel.** "At-Large Elections and Minority Group Representation." Minority Vote Dilution. Ed. Chandler Davidson. Washington DC: Howard U. Press, 1984: pp. 65-81.
- Downs, Anthony.** Economic Theory of Democracy. New York: Harper & Row, 1965.
- Engstrom, Richard L., and Charles J. Barrilleaux.** "Native Americans and Cumulative Voting: The Sisseton-Wahpeton Sioux." Social Science Quarterly 72, 1991: pp. 388-93.
- Everson, David, et al.** "The Cutback Amendment." Illinois Issues Special Report. Springfield, IL: Sangamon State U. Press, 1982.
- Greenberg, Joseph, and Kenneth Shepsle.** "The Effect of Electoral Rewards in Multicandidate Competition with Entry." American Political Science Review 81, 1987: pp. 525-37.
- Grofman, Bernard ed.** Information, Participation, and Choice. Ann Arbor: U. of Michigan Press, 1993.

- Grofman, Bernard, et al, eds. Representation and Redistricting Issues. Lexington, MA: Lexington Books, 1982.
- Guinier, Lani. Tyranny of the Majority. New York: Free Press, 1994.
- Holcombe, Randall G. The Economic Foundations of Government. New York: NYU Press, 1994.
- Holcombe, Randall. "The Median Voter Model in Public Choice Theory." Public Choice 61.2, 1989: pp. 115-25.
- Kuklinski, James. "Cumulative Voting and Plurality Voting: An Analysis of Illinois' Unique Electoral System." Western Political Quarterly. 26, 1973: pp. 726-46.
- Lakeman, Enid. How Democracies Vote. 4th ed. London: Faber and Faber, 1974.
- Lijphart, Arend, and Bernard Grofman, eds. Choosing an Electoral System. New York: Praeger, 1984.
- Mueller, Dennis. Public Choice. Cambridge, UK: Cambridge U. Press, 1979.
- Nicholson, Walter. Microeconomic Theory. 5th ed. Fort Worth: Dryden Press, 1992.
- Note. "Alternative Voting Systems as Remedies for Unlawful At-Large Systems." Yale Law Journal. 92, 1982: pp. 144-60.
- Rae, Douglas W. The Political Consequences of Electoral Laws. New Haven: Yale U. Press, 1967.
- Shepsle, Kenneth, and Ronald Cohen. "Multiparty Competition, Entry, and Entry Deterrence in Spatial Models of Elections." Advances in the Spatial Theory of Voting. Eds. James Enlow and Melvin Hinich. Cambridge, UK: Cambridge U. Press, 1990: pp. 12-45.
- Still, Edward. "Alternatives to Single-Member Districts." Minority Vote Dilution. Ed. Chandler Davidson. Washington D.C.: Howard U. Press, 1984: pp. 249-67.
- Still, Edward. "Cumulative Voting and Limited Voting in Alabama." United States Electoral Systems: Their Impact on Women and Minorities. Eds. Wilma Rule and Joseph Zimmerman. New York: Greenwood Press, 1992: pp. 183-96.
- Tullock, Gordon. "Entry Barriers in Politics." American Economic Review. 55, 1955: p. 458-66.
- Weaver, Leon. "Semi Proportional Representation Systems in the United States." Choosing an Electoral System. Eds. Arend Lijphart and Bernard Grofman. New York: Praeger, 1984: p. 191-206.

NOTES

- [1] A third formula is the majoritarian system which requires that the winner be able to beat all other candidates or parties combined, meaning the winner has to garner at least fifty percent of the votes. The difficulty of achieving this feat has made majoritarian systems rare, and thus it has been left out.
- [2] In both CV and SMD plurality the exclusion threshold is $1/(1+S)$, where S is the number of seats available in the election.
- [3] Prior to the early sixties when a series of court cases, (*Gomillion v. Lightfoot* (1960), *Baker v. Carr* (1962), *Gray v. Sanders* (1963), *Wesberry v. Sanders* (1964), and *Reynolds v. Sims* (1964)) created the "one man one vote" standard, districts did not have to be, and were rarely, equally populated.
- [4] Through the process of reapportionment, districts are redrawn to adjust to population shifts on a regular basis. In America this

occurs every ten years, coinciding with the census.

[5] In *United Jewish Organizations v. Carey* (1977) this was precisely the issue. In creating a minority majority black district in New York a minority majority Jewish district had to be dismantled, causing quite a conflict between calls for fair representation among both groups.

[6] The cube law predicts that the majority party will be over represented because $(1-S)/S = [(1-V)/V]K$ where S is the percentage of seats won by the party, and V is the percentage votes received by the party and K is 3, when two parties have 90% of the vote.

[7] A wasted vote can be defined as a vote that does not elect a candidate. Thus any vote that is superfluous for the winner, or goes to the loser is wasted.

[8] The practice of placing all of one's votes on a single candidate is called plumping.

[9] A geopolitical unit is geographic area defined by a political jurisdiction. For example, towns, counties, and states all can be considered geopolitical units. In addition, voting districts can also be considered a geopolitical unit, but many times the arbitrary and illogical definition of these districts prevents them from being genuine geopolitical units, that have an identity apart from their role in the electoral process.

[10] Following Crain, Holcombe, and Tollison (1979), marginal cost would be constant because each additional policy action within a given government involves the same "processing and approval procedures" (54-5). But average cost would be declining because there is a fixed cost of gaining control of the monopoly (government). Government output in terms of policy etc. would be determined by marginal valuation and the average cost (graph). Furthermore, the fixed cost can be expected to be quite high and thereby impose

a kind of entry barrier that protects the status quo government from competition for its monopoly rights.

[11] Arrow proved that no system of aggregating society's preferences could be devised that would meet five innocuous requirements.

[12] These benefits include not only the monetary rewards of government service, but also the prestige and other psychic benefits of government positions. Monopoly power also entails the ability of a legislator to deviate from the societally optimal production of services, in favor of the most personally profitable production point.

[13] The importance of this kind of political rear guard maneuver is abundantly clear in the recent history of the Republican party. In 1964, Barry Goldwater, in essence, outflanked the Rockefeller Republicans, and by 1980 the conservatives had taken complete control of the party. George Bush's move to the right after difficulties with the Buchanan faction of his party in 1992 is an example of an attempt to head off a flanking action.

[14] The experience of the Republican and Whig parties between 1856 and 1864 is a good example of this effect.

[15] Plumping is the act of placing all of one's votes on one candidate.