Abstract

Abstract Many people living in the United States consider our government and its elections to be a model of inclusion and fairness. It is easy to take pride in our accessible and open election process, yet all too often people find themselves voting for the " lesser of two evils" in an election. Despite our devotion to the two-party system that effectively dominates American politics, our voting policy encourages apathy, prevents dissenting opinions from being expressed with efficacy, and grants disproportionate power to national parties. When third party candidates do arise, they are viewed as " spoiler candidates" that prevent the most popular candidate from winning. In the 2000 presidential election of Bush V. Gore, many voters credited the third party candidate Ralph Nader, whose ideology was more aligned with Gore, for swinging the election towards Bush. If instead of the current voting system, the United States switched to approval voting, the changed role of third party candidates would strengthen democracy in America. Is There Really a Problem With the Current System? In 1950 the American economist Kenneth Arrow published a paper titled " A Difficulty in the Concept of Social Welfare" that clearly explained the problems of democratic choice; the ideas were innovative enough to win the Nobel Prize for Economics in 1972. Before this point, people certainly did not ascribe to the notion that the current system of elections was perfect but the extent of its flaws was not fully appreciated. Arrow's mathematical proof showed the impossibility of preferential voting always being fair with three or more candidates always meeting the following criteria: 1) Non-Dictatorship — No single person may select the outcome of an election, regardless of other voters. This mild condition is more a constraint of elections in general. 2) Pareto Efficiency — If every voter prefers candidate A to candidate B, then the outcome should

rank candidate A above candidate B. Also, if no voter prefers B over A, then the outcome should rank A over B. 3) Independence of Irrelevant Alternatives (IIA) — If voters prefer A to B, A must be ranked above B regardless of how they rank other candidates. Despite his heralded assertion that American elections are inherently flawed, Arrow's paper did little to change elections in America. Americans have historically favored a two-party system because it distills competing interests, facilitates compromise, and supposedly results in an average point of view (1). However, the recent dissatisfaction with American politics indicates that a serious review of our election policies is needed. Approval voting is a system that should be strongly considered in any debate regarding election policies. Approval Voting Approval voting is a system of elections in which each voter may vote (approve) of as many candidates as they want. The winner is the candidate who receives the most votes or approvals. It is different from our current system in only one way: ballots with votes for more than one candidate are not discarded. As an illustration of the approval voting, an election with three candidates X, Y, and Z occurs. X is a Republican candidate, Y is a Democratic candidate, and Z is a third party candidate who is focusing his attention on the need for universal health care. For the purpose of simplicity, let us assume that forty percent of the population support X, thirty-five percent favor Y, and the remaining twenty-five percent support candidate Z, but favor candidate Y over X. Under the current election system a vote for candidate Z would almost certainly be a waste because his appeal is so narrow. A vote for candidate Z in a sense becomes a vote for the Republican candidate. The result is victory for candidate X, despite the fact that over sixty percent of the population does not support him. This is the paradox of

the traditional American system. However, under the approval system candidate Y is elected and a much larger percentage of voters are satisfied with the outcome of the election because a candidate with a higher approval rating is the victor. As this simple example demonstrates, there are benefits to approval voting, but the number and impact of these benefits is probably greater than you would think. Benefits of Approval Voting 1) Voters have more possibilities with the balot. The first advantage of Approval Voting eliminates two flaws in our elections system that most Americans are already familiar with: the " lesser of two evils vote" and the wasted vote on a third party candidate. Voters are still able to vote for a single favorite if they choose or they can vote for all the candidates they find satisfactory. If their favorite candidate was not going to win, they can still demonstrate their support for him without worrying about wasting their vote. Therefore, approval voting increases the ability of the voter to truly express their views, which increases the competitiveness and effectiveness of the elections process. 2) An increase in voter turnout. A 2004 survey of California found the foremost reasons people chose not to vote was that their vote would not matter and that they felt their favorite candidate did not have a fair chance of winning. Approval Voting favors an increase in the overall number of candidates running, meaning people can vote for a candidate with whom they most identify. Reducing these two barriers to voting will increase participation and the voice of the people. 3) The candidate with the greatest overall support is selected. In the example we looked at above, the candidate who won under the current system was the candidate supported by the largest minority, not the candidate supported by the majority. In a recent example of this, Rick Santorum won the 2012 Iowa primary with 24.

6% of the vote. This result tells us that only a quarter of the population feels he is the best candidate. It also fails to acknowledge how the other three quarters feel about his candidacy. Additionally, over thirty percent of the vote went to candidates who received fifteen percent or less. Had Approval Voting been used the election would have been less impacted by a dedicated minority. 4) Multiple candidates can run effectively. This advantage is perhaps greatest in an open primary where two candidates are selected. Currently, if three democrats run against one republican, the republican candidate has an advantage that has nothing to do with the support for his political views or ideology. 5) A reduction in negative campaigning. With the American presidential election less than six months away, the amount of campaign material attacking other candidates is beginning to increase. According to Politico, despite voters' public condemnation of these tactics, they prove effective in creating doubt about a candidate's strengths making it a tactic that can be potent and fatal to an otherwise popular candidate in our current system. In contrast, approval voting encourages candidates to project the views of a majority of voters, rather than tailor their message to a small minority. Additionally, candidates will be incentivized to extend their appeal by reaching out to voters who might have a different first choice. 6) Approval Voting Would Require no New Equipment. Switching from the current system of voting to an approval system requires minimal changes. Polling places would only have to alter the current ballot counting computer programs. In the aftermath of the recent financial crisis, the budgets of many states are very constricted, even going so far as freezes on hiring and pay. If approval voting would require a large investment in new election equipment, it would meet considerable resistance in the legislature. Although this benefit

is not directly linked to Approval Voting, any changes to our electoral policy would certainly have to be inexpensive to be considered feasible. 7) Adding or removing candidates does not affect the votes of other candidates. If candidates drop out of an election, the number of voters approving the other candidates does not change. This would remove the pressure that candidates face to drop out early in races, giving voters a wider set of candidates to pick from. Drawbacks of Approval Voting 1) Approval Voting Forces Voters to Cast Equally Weighted Votes. Because Approval Voting operates on a binary system, voters cannot indicate a strong preference for one candidate over another. Realistically, voters will almost always have strong feelings for one candidate and weaker feelings for others, but they will still be forced to make either a yes or no decision about a candidate. Although is a drawback relative to other choices, it is also one that is face by our current system. 2) Approval Voting Could Cause a Candidate Who Received a Majority of the Vote to Lose. This is perhaps the largest drawback to the system, but it is very unlikely to happen. If enough voters showed support for the two favorite candidates, the popular notion of majority rule would be challenged. Although it is unlikely, the backlash from this scenario would be very large. 3) Voting for your second favorite candidate could cause you favorite to lose. Although this problem is less severe than in plurality voting, approval voting does not completely solve the spoiler problem. Although in theory parties would be benefitted by forming alliances, dominant candidates would still encourage their supporters to vote for only one candidate. If this were to occur, third party voters would not feel they were wasting their votes, but the chances of their candidate winning would still not be improved. Case Study: Bush V. Gore, 2000 Presidential

Election The 2000 U. S. Presidential election was decided by the closest margin in history. In fact, it is one of only four times that the winner in the Electoral College did not carry the popular vote. For all intents and purposes, the election came down to who would receive the 25 votes of Florida in the Electoral College. On the night of the vote, Gore conceded the election to Bush, but then reentered when he realized that Florida was still too close to call. The official vote count showed Bush as the winner by 537 votes. The ensuing legal battle, which ended with a decision for Bush by the U. S. Supreme Court, is still one of the greatest debacles in American politics. Unfortunately, instances like this are very rare, so it is difficult to think that enough popular dissatisfaction will exist for any serious change to occur, but it is reasonable to believe that the Romney V. Obama election will raise debates about a new system. After the election, many people blamed Ralph Nader for acting as a spoiler candidate and causing the victory of Bush, but few people realize that seven candidates in the election received more than one thousand votes. To this day, people continue to feel that the results were illegitimate and that the election was decided in court, rather than at the polls. Under an approval system, the number of people satisfied by this this election would have been much higher. To examine this election under an approval system, we will have to make a few assumptions. 1) Each voter would approve of candidates with similar ideology. This leads us to divide the election into two stances, liberal and conservative. The leftist parties in this election include Democratic, Green, and Natural Law parties. The conservative parties are the Republican, Reform, Libertarian, and Constitutional parties. 2) The supporters of Al Gore and George W. Bush only supported one candidate. Based off of the previous assumption, all

conservative parties would have the same number of votes, and the same goes for all democratic parties. Therefore, to break the tie, we will assume that Bush or Gore would still have won Florida under approval voting.

Candidate	Party	Traditional Votes	Approval Votes
George W. Bush	Republican	2, 912, 790	2, 948, 060
Al Gore	Democrat	2, 912, 253	3, 012, 022
Ralph Nader	Green	97, 488	99, 769
Patrick J. Buchanan	Reform	17, 484	35, 270
Harry Browne	Libertarian	16, 415	35, 270
John Hagelin	Natural Law/Reform	2, 281	99, 769
Howard Phillips	Constitution	1, 371	35, 270

The results of the election illustrate very clearly the benefits of approval voting. Under our traditional system, George Bush wins the election even though more than half of the state would prefer Al Gore. The election data shows that it is difficult to consider Ralph Nader to be anything other than a spoiler candidate. Furthermore, the other candidates would receive very little media attention because their supporters had little impact on the final results. In contrast, the approval system would declare Al Gore the winner and third party candidates would not detract from candidates who were more similar. Instead, the endorsements of fringe candidates would increase the coverage that their opinions receive, broadening the discussion of issues in the campaign. Although many supporters of George Bush defended his candidacy and claimed that spoiler candidates did not determine the election, it is very easy to believe that if Ralph Nader had not run, the results of the 2000 Presidential Election would have been entirely different. Summary Although the current system of elections in America is unlikely to change, it is still important to consider new methods of voting and how they could impact the voice that Americans have in our government. The Approval Voting method

permits voters to choose or " approve" of multiple candidates, which would solve many of the problems that keep people from the polls or create apathy among voters. Additionally, it would also increase the mathematical fairness of the elections process, as described in Kenneth Arrow's Nobel Prize winning paper. As highlighted by the Bush V. Gore Florida election results of 2000, the spoiler effect of third party candidates would be reduced. These candidates would be able to campaign for their issues with a larger support basis and the benefits of negative voting would be decreased across the board. Finally, changing to approval voting would require a minimal financial investment, which is crucial for support because of dramatic reductions in state budgets. Approval voting would improve our election process, but not without some drawbacks. Mathematically, it is possible for a candidate with the majority of the popular vote to still lose an election, which is directly counter to our notion of majority rule, and voting for a second candidate could potentially hurt your favorite candidate. Despite these drawbacks, approval voting would improve the quality of our elections because our elections process will more accurately reflect the opinions of the American people. -- [1]. The Tyranny of The Two Party System, Lisa Jane Disch, Page 67 [2]. Gaming the Vote: Why Elections Aren't Fair (And What We Can Do About It), William Poundstone, Page 21 [3]. Impossibility: The Limits of Science and the Science of Limits, John D. Barrow, Page 242 [4]. Approval Voting, Steven J. Brams & Peter C. Fishburn, Page 3 [5]. Approval Voting, Steven J. Brams & Peter C. Fishburn, Page 3 [6]. Approval Voting, Steven J. Brams & Peter C. Fishburn, Page 4 [7]. Approval Voting, Steven J. Brams & Peter C. Fishburn, Page 4 [8]. This benefit is a distillation of a few different benefits taken from the sources of

the other benefits. [9]. Approval Voting, Steven J. Brams & Peter C. Fishburn, Page 3 [10]. http://www. politico. com/news/stories/0808/12455. html, Mark Penn [11]. Choosing Our Choices: Debating the Presidential Nominating Process, Robert E. DiClerico & James W. Davis, Page 127 [12]. http://www. ctl. ua. edu/math103/voting/approval. htm [13]. " Approval Voting vs. Instant Runoff Voting", http://archive. fairvote. org/irv/approval. htm [14]. " Memorable Elections", http://www. history. com/topics/memorable-elections [15]. " 2000 Events Timeline, " http://www. uselectionatlas. org/INFORMATION/ARTICLES/pe2000timeline. php [16]. http://www. math. cornell. edu/~web1340/hw%204%20solutions. pdf [17]. http://www. math. cornell. edu/~web1340/hw%204%20solutions. pdf [18]. Impossibility: The Limits of Science and the Science of Limits, John D. Barrow, Page 242 [19]. Choosing Our Choices: Debating the Presidential Nominating Process, Robert E. DiClerico & James W. Davis, Page 127 [20]. " Approval Voting vs. Instant Runoff Voting", http://archive. fairvote. org/irv/approval. htm