Occupy Wall Street
Politics and Electoral Reform Working Group
Voting Experiment
Full Report

Make Voting Count:
an Experiment in Alternative Voting Methods

Who are we?

The Politics and Electoral Reform Working Group at Occupy Wall Street was formed in September 2011 with the aim of brainstorming ideas to address the various forms of systemic political and electoral corruption that have come to define the Republican-Democrat two-party state. In near-daily meetings over the course of the next two months, the group developed a proposal entitled *People Before Parties: Recommendations for Electoral Reform*, which called for a new spirit of experimentation in self-government and identified twelve areas for potential reform of the political and electoral system. Among the reforms recommended in that document was experimentation with alternative voting methods. After presenting *People Before Parties* to the NYCGA, a new subgroup was formed to develop a survey-style experiment to test a number of alternative voting methods against the traditional system employed in nearly all elections in the the United States, i.e. plurality voting.

Introduction

Our electoral system should promote principled, participatory self-government, and provide a level playing field for all voters and all candidates for elected office. Yet, year after year, many voters find themselves forced to choose between the lesser of two evils and, as is widely believed, often cast their ballots for candidates they do not support, or, more often, decide not to vote at all. The result is a government in which power is centralized in the hands of two narrow political factions that are incapable of providing adequate representation for the people they ostensibly represent.

The plurality method, also known as first-past-the-post, is widely viewed as a primary cause of this state of affairs. Plurality voting tends to reduce choice by favoring a two-party system, and has resulted in one-party rule in many states across the country. Fortunately, there are viable alternatives to plurality voting which can be implemented at the local and state level.

The Occupy Wall Street Politics and Electoral Reform Working Group has developed this survey-style experiment to test a number of alternative voting methods against the traditional plurality system employed in the United States. The resulting model allows us to compare and contrast three

different alternative voting methods with plurality voting, as well as investigate how the same sample of individuals behaves under different voting systems, while also providing participants with a practical experience of the logic particular to each individual method.

The Methods

For the sake of simplicity, the group chose to focus on a discrete number of alternative voting methods that can be implemented under single winner electoral systems, thus, alternative systems such as proportional representation were excluded from the present test. Research into the most prominent alternative voting methods suggested a test comparing plurality voting with range voting, approval voting and instant runoff (i.e. ranked choice) voting. Under **plurality voting**, each voter casts a ballot for one and only one candidate. The candidate with the most votes wins. Under **ranked choice voting**, respondents rank their top three choices in their order of preference and the results are calculated as an instant runoff. Under **range voting**, each voter rates each candidate on a scale from 0 to 5. The candidate with the most points wins. Under **approval voting**, participants indicate whether or not they approve or disapprove of each candidate, and may approve of multiple candidates. The candidate who receives the most approvals wins.

Hypothesis

It was noted above that the plurality voting method tends to result in a two-party system. The basis of this process is a phenomenon known as strategic voting. In plurality elections, voters may cast their ballot for a candidate whom they do not sincerely support in order to prevent an undesirable outcome. In other words, they vote for the "lesser evil" between the two major parties rather than a third party or Independent candidate whom they prefer over both major party options. For example, a libertarian-leaning Independent may feel a compulsion to vote for a Republican rather than a Libertarian in order to prevent the election of a Democrat. On the other hand, a progressive-leaning Independent may cast a disingenuous vote for a Democrat rather than support a Green in order to prevent the election of a Republican.

It is safe to say that New Yorkers and those who gravitate toward Occupy Wall Street events in NYC tend to lean to the left. On the New York City Council there are 36 Democrats and 5 Republicans. In the city's congressional delegation there are 22 representatives, 18 Democrats and 4

Republicans.[1] For the majority of New Yorkers, it is the Democrats who are the lesser evil between the two major parties. Past surveys at Occupy Wall Street have found, furthermore, that a large portion of Occupy Wall Street protesters identify themselves as Independents, have no party preference, or favor a third party. A Fordham poll from October reported that 39% said they do not identify with any party, 25% said they identify with the Democrats, 11% said they were Socialists, 11% identified themselves as Greens and 12% stated "other." It was thus to be expected that our sample would reflect this tendency and its corresponding ideological tilt: voters would have a strong Independent streak but lean toward the Democrats. With this in mind, we sought to answer the following questions: how do individual and aggregate voting behaviors change when not constrained by the strategic logic of the plurality system? What can we conclude about plurality voting when we compare it to the alternatives? On the assumption that there is no ideal voting method, can we say that some are better than others? If so, which are superior to plurality?

First Major Test and Sample

After testing and tweaking the program over a number of weeks, we collected our first major sample totaling over 315 respondents surveyed at Occupy Wall Street-related events in New York City between April and May of this year. In the model we developed, each participant answers one question under three different voting methods: plurality and two of the three alternative systems, the latter determined randomly by a program algorithm. The program for the model was coded by a member of the group and the application was loaded onto an iPad which served as our mobile voting station.

Participants were asked to respond to one question, which polling organizations call the "generic ballot": if this year's elections were held today, what party's candidates would you favor? Six choices were listed on our electronic ballot in a randomly determined order (Democratic Party, Green Party, Independent candidates, Republican Party, Libertarian Party, and the Socialist Party) and a write-in option was provided under each of the four methods.

The findings of our first major test suggest that plurality voting results in anomalous outcomes which are not representative of the overall sample. Simply put: the outcome of the plurality system was not reproduced by any other method, but the results of the three alternative methods converged with and substantiated one another.

1 League of Women Voters.

The Sample

Our sample includes the responses of roughly 315 individuals who agreed to participate in the survey. Participants were approached by a survey team member at Occupy Wall Street related events between April and May 2012. Test sites included Liberty Plaza, Union Square, Bryant Park, Times Square, and Central Park. We relied on the honor code to ensure that no individual provided more than one response to the test, and, based on the team's experience, we are confident that there were few, if any, double votes.

Since the experiment was conducted at Occupy Wall Street-related events in New York City, the sample contains a great many responses from Occupy Wall Street protesters, but also includes those of interested passers-by, whether locals or tourists. We did not collect any information from any individuals other than their responses to the single survey question, and hence we do not have a demographic profile of our overall sample.

Our intention in the present study was not to collect a statistically random sampling of the country's overall population. Limited resources put such an effort beyond our reach. Given our site selection, however, we may well have something approaching a statistically random sampling of individuals who visited or participated in Occupy Wall Street-related events this past spring. Indeed, this project represents one of the largest samplings of Occupy Wall Street protesters to date. A Fordham University study of OWS NYC from last October obtained 301 responses. That same month, a survey of Occupy Wall Street protesters performed by Douglas Schoen's polling firm relied on a sample of 198 respondents.

Under the model we constructed, every respondent answered the generic ballot question under three of the four voting methods we tested: plurality and two of the three alternatives, the latter determined randomly by a program algorithm. We thus obtained 316 responses to the question under the plurality method, 216 under range voting, 208 for approval voting and 208 under the instant runoff.

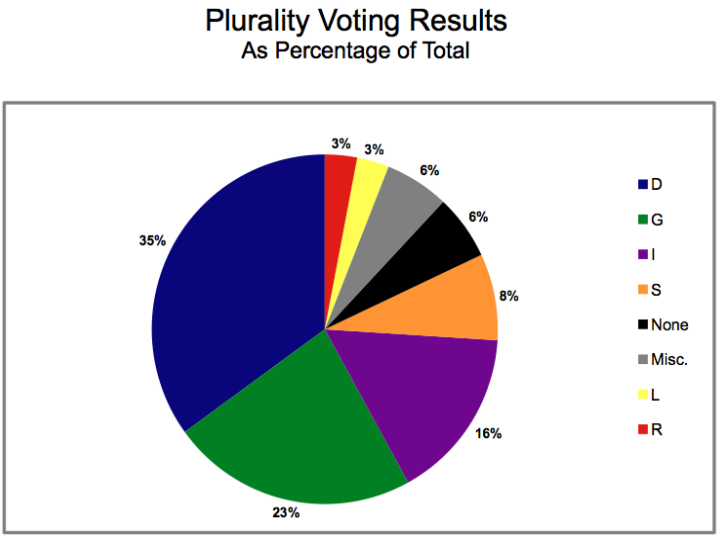
Results

In our experiment, the plurality test resulted in what is arguably an anomalous outcome. It was the only method under which the Democratic Party came out on top in our sample, though its support was quite shallow, winning with a plurality of 34.8% . On the other hand, when not constrained by the strategic logic of the plurality vote, respondents were capable of broad consensus in favor of a number of alternatives to the Democrats. Under all three of the other methods, the Green Party was the overall

favorite, with the support of 74% of respondents under approval, 68.9% support under range, and a 46.6% plurality victory in the instant runoff. Furthermore, Independent candidates and the Socialist Party bested the Democrats under approval and range. On the ranked choice ballot, the Democrats came in second place with 41.3%.

Under the plurality method, we collected 316 responses to the survey prompt. On our model, every respondent answered the poll question under the plurality method, and the plurality prompt was the first tested for every response. As stated above, the question we employed was a variation of what polling organizations call the "generic ballot": If this year's elections were held today what party's candidate's would you favor? Participants were provided with a choice of the Democratic Party, Green Party, Independent candidates, Socialist Party, Republican Party and Libertarian Party. There was also a write-in option.

The plurality vote resulted in a clear outcome, but with very shallow support for the top vote-getter. Of those polled, 34.8%, or 110 respondents, opted for the Democratic Party, which was followed by the Green Party, which was chosen by 23.1%. Independent candidates took the third spot with 16.5%. The Socialist Party was chosen by 7.6%, while 3.16% preferred the Libertarian Party and 2.53% opted for the Republican Party. The write-in option was utilized by 12.34% of respondents, among whom a variation of "none" or "none of the above" was the most common choice at 6.33%. The remaining write-ins, 6.01%, were spread out over a variety of options, which we grouped as Miscellaneous. Among these were the names of other third parties such as the Freedom Party and the Revolutionary Communist party, the term Anarchist, Occupy Wall Street and the names of individuals such as Vermin Supreme.



Under the plurality voting system, the winner need not garner any specific threshold of support, but must only receive more support than any other option. Under the plurality system, the winner needs only to obtain the support of a plurality of respondents, not a majority. Thus even though a significant majority of respondents – 65% – did not support the Democratic Party in the plurality vote, the Democratic Party nonetheless took the top spot in the poll as the non-Democratic Party majority was split between the other options.

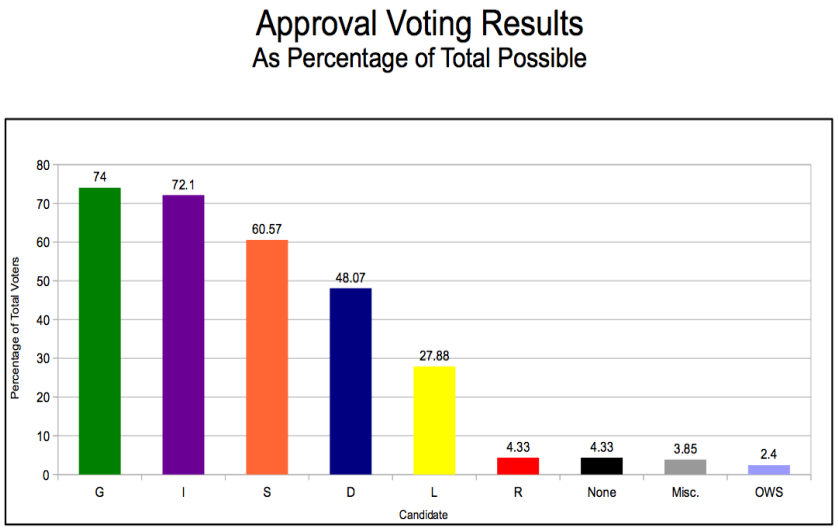
To remedy this defect, some polities require that a runoff election between the top two plurality vote-getters must follow the general election to ensure a majoritarian outcome. For the same reason, the supporters of the plurality method and self-described pragmatists urge the electorate to engage in strategic voting to avoid vote splitting. This problem, however, can also be addressed by employing alternative voting methods.

The shallowness of the support for the Democratic Party under the plurality method was underscored by the outcomes of the three other systems we tested. Plurality was the only method in which the Democratic Party prevailed. In all three other methods, the Green Party was the favorite.

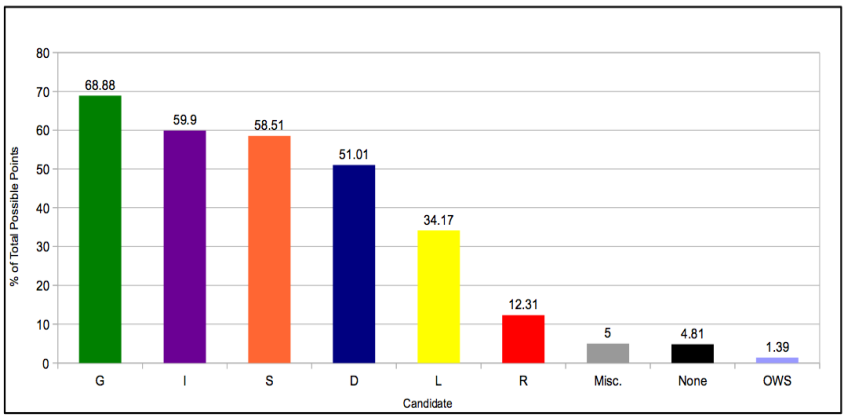
Let's take a look at the results for the approval vote. Under approval voting, voters indicate whether they approve or disapprove of each candidate and may approve of multiple candidates. The candidate who is approved by the largest number of voters wins. Unlike the plurality system, approval voting does not resemble a zero-sum game.

In our sample, 208 individuals participated in the approval vote. A valid response required that at least one of the values submitted by respondents differed from the others. Participants were not able to submit a ballot on which they approved or disapproved of all available options. The result was a fairly close contest between the Green Party option and Independent candidates, but the Green Party was the most preferred choice. 74% of all respondents approved of the Green Party. They were followed by the non-partisan option, Independent candidates, which received the approval of 72.1% of all participants. The Socialist Party came in third with 60.57%. They were followed, in fourth place, by the winner of the plurality vote. The Democratic Party was approved by fewer than half of all respondents at 48.07%. Support for the remaining options then drops off significantly. The Libertarian Party was approved by 27.88% of respondents and the Republican Party was approved by just 4.33%. The write-in option was utilized by 10.58% of those polled, with the largest share going to some variation of “none” or “none of the above,” which received an approval from 4.33% of all participants.

6.25% of respondents wrote in miscellaneous options.



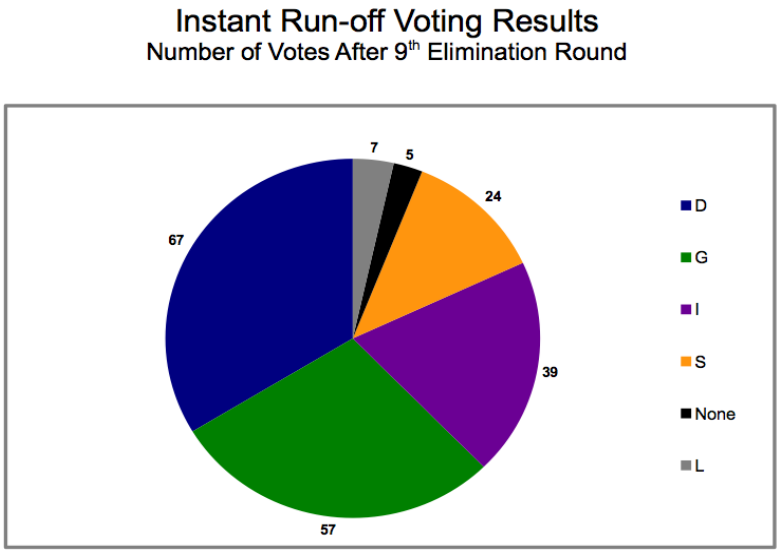
Let's consider now the range voting test. Under range-based systems, voters rate each candidate individually on a predetermined scale, for example, from 1 to 10. The candidate with the most total points wins. In our model, respondents were asked to rate each option on a scale from 0 to 5, with 5 being the most favorable. 216 individuals participated in our range voting test. Thus the most points any option could have received was 1,080.



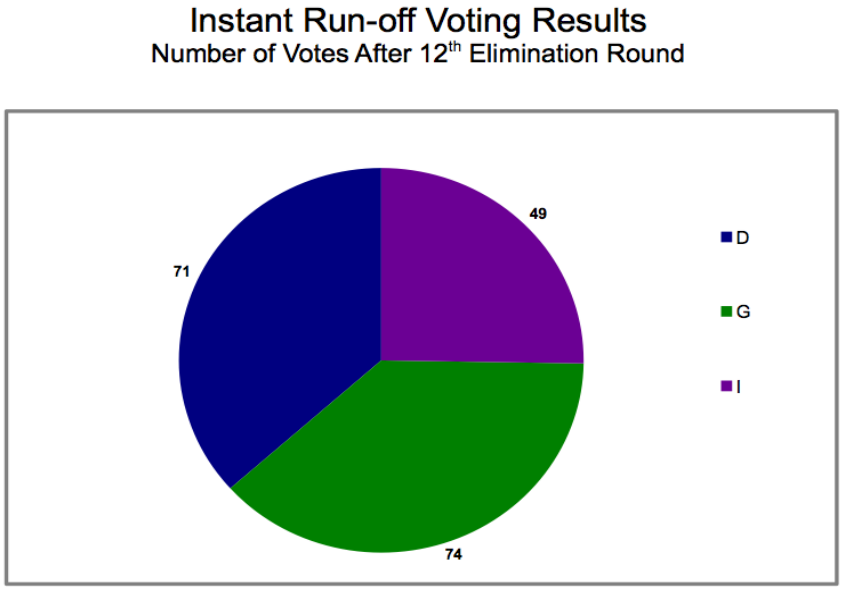
The overall results from the range voting variation closely approximated those of the approval vote, at least in terms of the order of favorability. The Green Party received the most points, totaling 68.88% of the total possible, followed by Independent candidates 59.9%, the Socialist Party 58.51%, the Democratic Party 51.01%, the Libertarian Party 34.17%, and the Republican Party at 12.31%.

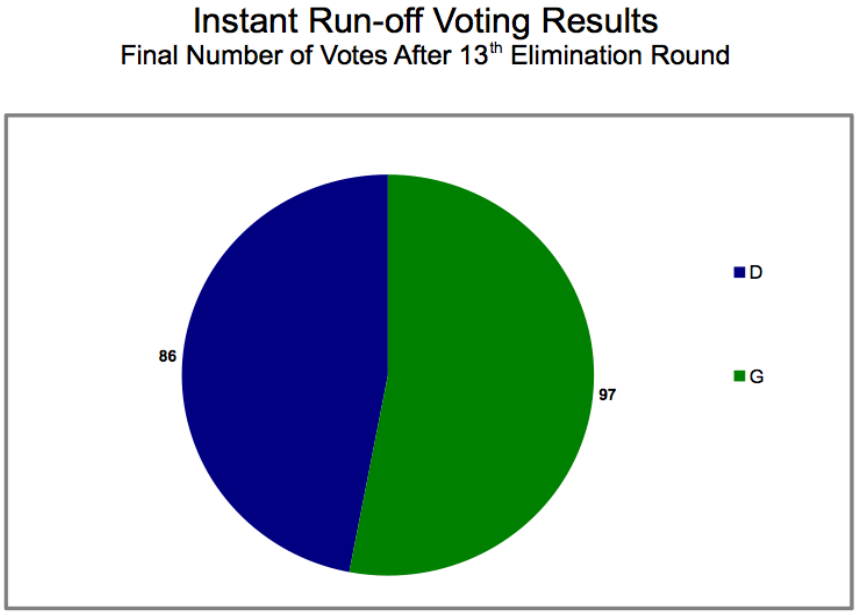
Among write-ins, many cast their ballots for some variation of "none" among other miscellaneous options, respectively totaling 4.81% and 6.39% of the total points possible.

Under the instant runoff method, also known as ranked choice, voters rank candidates in order of their favorability. In our model, participants were asked to rank their top three choices in order of preference. The instant runoff test was the only alternative method in which the winner of the plurality vote was among the top two vote-getters. Though the Democratic Party received the largest amount of top choice votes, the Green Party came out in first place after the final elimination round. As in the range voting test, 208 individuals participated in the instant runoff simulation.



On the initial count, the Democratic Party was the most common first choice option, but received only 31.25% support. They were followed by the Green Party at 26.92%, Independent candidates with 17.78%, the Socialist Party at 11.53%, the Libertarian Party at 2.88%, and the Republican Party (.01%). 8.17% wrote in an option of their own. After the twelfth elimination round the three remaining options were the Green Party (35.6%), the Democratic Party (34.13%) and Independent candidates (23.5%). Following the elimination of the Independent candidates option, the Green Party led with 46.6% support, followed by the Democratic Party at 41.3%.





That concludes our report on the topline results from the first full test and survey. More detailed analyses of our findings will be published in the near future. In the remaining sections of this report, we discuss some critical points regarding our present model, as well as our plans for future installments of the experiment.

Self-Critique

In our group's internal discussions subsequent to the development of our model and collection of our data sets, we identified a number of limitations to our model and points of concern on our method that we will address in future iterations of the project. This will be elaborated in the final section of this report.

On the Sample. As stated above, due to its size and scope, our survey sample cannot be construed as representative of the general population, though one could make the case that it may well be representative of Occupy Wall Street participants. Nor did we collect any demographic information on those who participated in the experiment.

On the Model. When we developed the model for the experiment, we decided that respondents would only participate in three of the four methods we sought to test, namely, plurality and two of the three alternative methods. The primary basis for this decision was the concern that having each individual respond to the same question under four different methods would be too time consuming and turn off potential participants. This did not turn out to be the case, however. Indeed, many participants were disappointed that the poll was not more involved and that they were not able to test for themselves all four of the methods included in our experiment. Another drawback of this aspect of the model was that our data sets were not as robust as they could have been. Though over 300 individuals participated in the plurality test, our data sets for the alternative methods are, of course, two-thirds that size.

On the Question. By definition, the so-called "generic ballot question" – which we employed in the present test – lacks a certain level of precision. However, given the times and places at which we conducted the experiment, presenting participants with a more precise question, for instance, one which included the names of individuals actually seeking a given public office, proved untenable.

On the Survey Method. In all, three different individuals from our team presented potential respondents with the electronic tablet when asking members of the public if they would like to participate in the test. Though we employed a common script for our pitch, in future we will seek to be more rigorous in relying on the same language when approaching potential respondents.

IRV Tally. Of the methods we tested, the Instant Runoff Vote is the most difficult to tally. Because we did not have sufficient time or resources to create a program to automatically tally the IRV results, and because we were wary of employing the available online tallying software, the results were tallied by hand. In future we would prefer to tally these results by hand and test them against an

automatic electronic tally.

Moving Forward

We understand the present experiment to be the first relatively large-scale test of our model and method. In the coming weeks, we will be releasing more detailed analysis of the results from the test. We will also be improving our model in preparation for an expansion of the size and scope of the experiment. In the next version of the program, all respondents will answer the same question under all four methods, rather than just three, and it will have the ability to gather basic demographic information from participants if they choose to volunteer that information. Our goal is to have the new and improved program up and running by this coming fall, as we are now planning to conduct an exit poll style survey in a strategically chosen district in New York on Election Day this coming November. In our Election Day survey, we will reproduce a portion of the actual ballot presented to voters. This will allow us to compare official vote tallies under the plurality method with our own sample of the same voters utilizing the three alternative methods tested by our program. In this coming months we will be recruiting volunteers to help out for the Election Day survey and raising funds to obtain or rent the necessary electronic tablets.