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## The Rules of the Game: A New Electoral System

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Americans have been using essentially the same rules to elect presidents since the beginning of the Republic. In the general election, each voter chooses one candidate; each state (with two current exceptions) awards all its Electoral College votes to the candidate chosen by the largest number of voters (not necessarily a majority) in that state; and the president-elect is the candidate with a majority of Electoral College votes.

Primary elections for president have also remained largely unchanged since they replaced dealings in a "smoke-filled room" as the principal method for selecting Democratic and Republican nominees. In each state, every voter votes for one candidate. In some states, the delegates to


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'The Electoral Vote: Now Let Us Look at It from Another Point of View'; illustration by Thomas Nast, 1876 the national convention are all pledged to support the candidate getting a plurality of votes (again, possibly less than a majority). In others, delegates are assigned in proportion to the total votes of the candidates.

These rules are deeply flawed. For example, candidates A and B may each be more popular than C (in the sense that either would beat $C$ in a head-to-head contest), but nevertheless each may lose to C if they both run. The system therefore fails to reflect voters’ preferences adequately. It also aggravates political polarization, gives citizens too few political options, and makes candidates spend most of their campaign time seeking voters in swing states rather than addressing the country at large.

There are several remedies. Perhaps in order of increasing chance of adoption, they are: (1) to elect the president by the national popular vote instead of the Electoral College; (2) to choose the winner in the general election according to the preferences of a majority of voters rather than a mere plurality, either nationally or by state; and, easiest of all, (3) to substitute majority
for plurality rule in state primaries.

## Replacing the Electoral College

Donald Trump lost the popular vote to Hillary Clinton by more than 2.8 million votes, but won the presidency through the Electoral College. This discrepancy has caused a public protest (millions of people signed a petition urging Trump electors to vote for Clinton at the formal meeting of the college on December 19). Similar protests were lodged in 2000 when Al Gore, winner of the popular vote, lost to George W. Bush in the Electoral College.

It is hardly surprising that disappointed backers of Gore and Clinton, with more support from American voters than their opponents, should complain about the outcomes in 2000 and 2016. What is particularly relevant is the clear unpopularity of the Electoral College as an institution. In a 2013 Gallup Poll, for example, 63 percent of respondents favored deciding presidential elections by the popular vote, while only 29 percent preferred the current system.

However, literally getting rid of the Electoral College would require a constitutional amendment (the most recent filing for such an amendment came from Senator Barbara Boxer and Representative Steve Cohen in November). That would need approval by two thirds of each house of Congress as well as by three quarters of states-a virtually insurmountable barrier in America today.

Somewhat more realistically, each of the forty-eight states that currently award Electoral College votes on a winner-take-all basis could instead award them either district by district, as is now the case in Maine and Nebraska, or in proportion to the statewide vote totals. Either change would make the respective outcomes from the Electoral College and popular vote more likely to coincide (historically, there have been five elections-two within the last sixteen years-where they have not coincided). Indeed, the Constitution in Article II, Section 1 allows an individual state to make such changes when it says, "Each state shall appoint [electors], in such manner as the Legislature thereof may direct." Still, unless the other states are doing so too, a state has little incentive to move away from winner-take-all; a swing state, in particular, would be loath to surrender the attention it gets from candidates and the press.

Currently, the most promising initiative to replace the Electoral College is the National Popular Vote Interstate Compact. Beginning in 2006, a sequence of states have made a pledge to award their electoral votes to the winner of the nationwide popular vote on condition that the states within the compact command at least 270 electoral votes-the minimum needed to elect a president. This condition creates a coordinating mechanism-states would move to the new system together, not unilaterally.

So far, ten states and the District of Columbia have joined the compact, amounting to 165 electoral votes. All of them are solidly Democratic-probably reflecting the election of 2000, when Al Gore won the popular vote but lost in the Electoral College. In all likelihood, we will have to wait for an election in which the same thing happens to a Republican candidate before
any red states sign on. More importantly, even if the compact succeeds (so that the Electoral College is in effect "replaced"), the election system will remain highly unsatisfactory unless plurality rule-election by less than a majority-is also replaced. Why is this the case?

Plurality Versus Majority Rule
This year's Republican and Democratic nominees differed sharply on almost every major policy issue-trade, immigration, climate change, minority rights, and health care, to name a few. But they were also viewed "unfavorably" by a majority of the public. Many citizens were appalled by Donald Trump's personality and platform yet couldn’t bring themselves to vote for Hillary Clinton for various reasons (including, in the critical last days of the election campaign, baffling announcements from the Federal Bureau of Investigation). It is worth noting that nearly 7 million voters ended up voting for third-party candidates who had no chance of winning; and 42 percent of those eligible didn't vote at all.

A good many disaffected citizens-especially moderates of one kind or another-might have voted for, say, Michael Bloomberg had he been on the ballot. Others-especially millennials and liberals-might have voted for Bernie Sanders. But Bloomberg and Sanders chose not to run as third-party candidates in the general election; they likely thought they would have taken away votes from Clinton and handed the election to Trump.

Bloomberg and Sanders were deterred by the prospect of "vote-splitting"-in which the votes for a group of roughly similar candidates are divided among them, allowing a very different sort of candidate to win. Plurality rule, the current method for awarding electoral votes, is highly vulnerable to splitting votes, as Bloomberg and Sanders understood. (In 2000 Ralph Nader notoriously ignored this danger and attracted nearly 100,000 votes in Florida, mostly at Al Gore's expense, giving George W. Bush the presidency.) Still, by staying out of the general election, Bloomberg and Sanders deprived the public of alternatives many would have preferred.

Thus, an election method subject to vote-splitting creates a pernicious choice: either attractive political candidates-e.g., Bloomberg and Sanders-stay out of the race, or they join in (as did Nader) and risk throwing the election to their ideological opposite.

Are there election methods that always (i.e., for all rankings that voters might conceivably have) give us a clear-cut winner, respect everyone's vote, and avoid vote-splitting (or equivalent conditions)? Unfortunately, the answer is no. Some sixty-five years ago, the economist Kenneth Arrow published his Impossibility Theorem, showing that no electoral method can satisfy all three requirements (although there are many rules that satisfy two out of three-for example, plurality rule respects everyone's vote and produces a winner, but often leads to vote-splitting). ${ }^{\underline{1}}$ The natural follow-up question is whether there is an election method that satisfies these requirements more often (i.e., for a wider class of voters' rankings) than any other. Here, fortunately, there is a clear answer: the solution is the classic method of
majority rule, strongly advocated by the Marquis de Condorcet, the great eighteenth-century political thinker.

Instead of limiting a voter to choosing a single candidate, Condorcet proposed that voters should have the option of ranking candidates on the ballot from best to worst. The winner is the candidate who, according to the rankings, would beat each opponent in a head-to-head contest.

Suppose, for example, that in a three-person race consisting of Trump, Clinton, and Bloomberg, the voters in a particular state (such as Florida) break down into three groups (see Figure 1 below). There are the Trump supporters, consisting of 45 percent of the voting population, who put Trump first, Clinton last, and Bloomberg in between. Then there are the Clinton supporters (40 percent), who have the opposite ranking. Finally there are the voters who detest Trump, can't accept voting for Clinton (and so, effectively, aren't distinguishing between the two), but find Bloomberg acceptable (15 percent). In this example, a majority of voters ( 40 percent, plus 15 percent) prefer Bloomberg to Trump, and a majority ( 45 percent, plus 15 percent) also prefer Bloomberg to Clinton. Thus Bloomberg is elected as the majority winner.

This example illustrates that majority rule entails comparing how many voters prefer candidate A to candidate B for every pair A and B. It also shows how majority rule avoids vote-splitting and therefore avoids deterring potential candidates such as Bloomberg. Voters opposed to Trump need not face a choice between Clinton and Bloomberg; they can rank both candidates above Trump without fear that one will cancel out the other.

The example shows too how majority rule may reduce polarization. A centrist like Bloomberg may not be ranked first by a large proportion of voters, but can still be elected if viewed as a good compromise. Majority rule also encourages public debate
 about a larger group of potential candidates, bringing us closer to John Stuart Mill's ideal of democracy as "government by discussion."를 s majority rule a realistic alternative to plurality rule in presidential elections? We think so.

It can be adopted state legislature by state legislature; no constitutional amendment or federal legislation is needed. And, unlike the consequences of replacing the Electoral College, a state suffers no loss of influence by making the change unilaterally.

Moreover, the approach has already proved itself: a somewhat similar ranking system-called instant-runoff voting (IRV)—is already being used successfully in mayoral elections in several American cities, including San Francisco and Minneapolis. (In IRV, voters rank candidates as in majority rule. If a candidate is ranked first by a majority, he or she is elected. Otherwise, the candidate ranked first least often is eliminated, and the process continues until someone gets a majority.) IRV doesn't avoid vote-splitting as successfully as majority rule but is far better on that score than plurality rule.

Finally, voters have the option to rank as many or as few candidates as they wish-the candidates they do not rank are treated as tied at the bottom of the order (for example, the third group of voters in Figure 1 rank Bloomberg first and leave Trump and Clinton unranked). The result is that majority rule doesn't impose a greater burden on voters than plurality rule and gives them more freedom of expression.

Indeed, since majority rule is such an appealing idea, one might wonder why it isn't already being used for presidential elections. Apart from inertia, we suspect the main reason is technological. Majority rule entails a more complicated process of vote-counting than plurality rule; making comparisons between each pair of candidates. (See Figure 2 on this page.) Of course, this poses no problem at all for modern electronic methods. However, until such technologies were available, majority rule was probably out of the question for elections involving millions of voters. Today, we need not be limited by problems that no longer exist.

Certainly majority rule is not a perfect system, and Condorcet himself showed that there are circumstances-rare in practice-in which no candidate can beat every other candidate in a head-to-head contest (that is, Arrow's requirement that there be a "clear-cut winner" fails). In that case a tie-breaking method would be needed, such as having a runoff between the two top candidates.

## Presidential Primaries

Though adopting majority rule in general elections may be the most important change that America should now make, the simplest and most straightforward voting reform would be to replace plurality rule with majority rule in state primaries. This would require no changes in laws at all-the Republican and Democratic parties could simply amend their rules.

How did Donald Trump win the Republican nomination? The answer is not entirely obvious because there were several other candidates who, according to polls, would probably have beaten him in the early Republican primaries in a one-on-one race. For example, an ABC News/Washington Post poll on March 8 showed that both Ted Cruz and Marco Rubio would have beaten Trump easily in a two-candidate contest. And Trump failed to get a majority in
the first seventeen of the primaries he won. But the problem, again, is vote-splitting: the anti-Trump vote was dispersed among Cruz, Rubio, Jeb Bush, John Kasich, and other candidates. This enabled Trump to win the early contests and build the momentum he needed to win the nomination.

To understand what happened, imagine a scenario in which 40 percent of voters rank the candidates in the order of Trump, Rubio, Cruz; 35 percent rank them in the order of Cruz, Rubio, Trump; and the remaining 25 percent rank Rubio first, then Cruz, and then Trump. Under the current plurality system, where only voters' top choices matter, Trump wins the primary (with 40 percent). But under majority rule, Rubio wins: 60 percent of voters prefer him to Trump, and 65 percent prefer him to Cruz.

## Changing the Rules

Would majority rule have defeated Donald Trump, either in the primaries or in the general election? Quite probably it would have. But here we want to make a more general point about presidential voting methods. Majority rule comes closer to satisfying people's preferences than any other method, including the current one. After 224 years, perhaps it is time to change the rules of the game.

1 For discussions of this theorem and its implications, see Eric Maskin and Amartya Sen, The Arrow Impossibility Theorem (Columbia University Press, 2014). $\llcorner$

2 On related issues see Amartya Sen, Collective Choice and Social Welfare, Enlarged Edition (Penguin UK and Harvard University Press, forthcoming 2017). $\llcorner$

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