2

Ballot Structures

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To what extent do electoral institutions in the United States contribute to overrepresentation of political extremism among officeholders? And what institutional reforms might counteract this overrepresentation insofar as it exists? This chapter seeks to answer both questions,[1] posed in our task force's mission statement, by examining the traditional electoral system in the United States: partisan primaries followed by a general election in which voters cast ballots for a single candidate and the candidate with the most votes wins, whether or not they receive a majority. This system differs from other possible ways to structure a single-winner election, which this chapter explores. Chapters 3 and 4 consider the possibility of proportional representation (PR) for seats in a state legislature or the US House of Representatives, an option unavailable for any election for a single officeholder, such as a US senator or a state governor.

Focusing on the goal of constraining extremism, this chapter considers how the following alternatives compare to the current system:

1. The two-round system used in California and Washington, which hold nonpartisan "top-two" primaries that advance only two candidates to the general election. These two finalists can be from the same party or different ones, or they can be independents (since party affiliation is irrelevant for participation in the nonpartisan primary), and the winner of the general election is simply the finalist who receives more votes than the sole opponent (by definition, a majority of valid votes cast).[2]

2. The two-round system recently adopted in Alaska and provisionally adopted in Nevada (subject to a confirmation vote in November 2024). These states hold the same kind of nonpartisan primary as

California and Washington do, except that four (in Alaska) or five (in Nevada) candidates advance to a general election where ranked-choice voting (RCV) is used to determine a single winner. The type of RCV employed in these systems can be called lowest-plurality runoff (LPR), because it functions by sequentially eliminating the candidate with the fewest first-place votes until there is a single winner.

3. A system that makes a modest but significant modification to the Alaska-Nevada model, altering the tabulation method of RCV used to identify the winner from the four or five finalists in the general election. Instead of LPR, this system uses a sequential elimination procedure that guarantees the election of the candidate who is preferred over each of the other candidates; it can thus be called most-preferred voting (MPV).

4. A "top-three" variation on the nonpartisan primary used in California's "top-two" and Alaska's "top-four" systems. Under this version of MPV, the three-finalist general election is conducted with direct head-to-head choices between each pair of candidates rather than with RCV.

5. A partisan primary system such as Maine's that uses RCV, whether by LPR or MPV.

Comparing these different electoral systems, this chapter assesses their relative propensity to either cause or counteract the overrepresentation of political extremism among the winning candidates. A significant portion of the task force's deliberations concerned different possible definitions of political extremism. Broadly speaking, there are two main types. The first might be called "substantive" or "absolute" extremism because it is defined in terms of its content, which in the context of a democracy embraces antidemocratic stances. This kind of antidemocratic extremism can exist on the right or the left (for example, Nazism or Leninism). The second type of political extremism can be called "empirical" or "relative" because it is defined by its distance from the electorate's median voter: the further the winning candidate is from the electorate's median, the more extreme that candidate is. While this distance can be measured in terms of ideology, it can also be measured in terms of degree or intensity of partisanship—which can be a function of other factors besides ideology, including emotional loyalty or allegiance to the party.[3]

For the purposes of comparing and evaluating different electoral systems, this chapter employs the "empirical" or "relative" definition of extremism. That is because the choice of electoral procedures should be content neutral, both to align with First Amendment values and to advance related notions of "political liberalism" as the philosopher John

Rawls used the term: to convey the government's neutrality to all reasonable but divergent viewpoints.[4] But this chapter should also be useful to those concerned by the threat of political extremism defined substantively as antidemocratic postures, since substantive extremism also tends to be relatively extreme as measured by distance from the median voter.[5]

The type of relative extremism this chapter employs is *partisan* rather than *ideological* extremism. In doing so, this chapter does not take a position on the relationship between partisanship and ideology or the extent to which partisan polarization is or is not related to ideological polarization. Instead, this chapter rests on the commonplace observation that more and more Americans display a kind of tribal loyalty to their political party, with a corresponding hostility to the opposing party. This animosity is often called "negative" or "affective" polarization. But however partisan polarization is characterized, the important analytical point is that voters and candidates can be understood as varying in the degree or intensity of their partisanship.[6] The "overrepresentation" of extreme winners produced by an electoral system can be defined as the tendency of that system to produce winning candidates who on average are further from the electorate's median voter in terms of their degree of partisanship than the voters are on average themselves.[7]

For purposes of this analysis, the electorate can be either an entire state or a district within a state. In the latter case, the median voter may be much "redder" or "bluer" than the median voter in the state as a whole. (The Cook Partisan Voting Index is one well-known measure of how much redder or bluer a state or district is relative to the nation.[8]) An electoral system that aims to produce winners supported by the electorate's median voter—as any majoritarian electoral system does—will seek to elect candidates supported by a district's median voter if the electoral system operates at the district level. Thus, if this kind of electoral system is used for all the districts of a state's legislature, it will not endeavor to produce representatives who all correspond to the *statewide* median voter. Instead, it will aim to produce representatives who correspond to their district's median voter.[9] With respect to statewide elections—for governor or US senator, for instance—the goal will be to elect a candidate who reflects the choice of the statewide median voter in keeping with the principle of majority rule.

The overrepresentation of extreme winners can occur in highly competitive "swing" (or purple) electorates, either statewide or district specific, or in more lopsided (deep-red or deep-blue) ones. To illustrate how different electoral systems perform with respect to the problem of overrepresenting extreme winners, this chapter focuses mostly on

highly competitive "swing" electorates. (The online appendix to this chapter contains a similar analysis for more lopsided districts.)[10]

This chapter concludes that the traditional system of partisan primaries followed by plurality-winner general elections is especially susceptible to overrepresentation of partisan extremism when the electorate itself is highly polarized and voters are relatively far from the electorate's median. The kind of system adopted in Alaska and provisionally in Nevada can help considerably to counteract the election of extreme winners. However, as polarization of the electorate intensifies, the ability of the form of RCV used in these states, LPR, to avoid the election of extremists is reduced dramatically, and the only effective method of substantial depolarization is to adopt some form of MPV.[11] This could be a modified version of the Alaska-Nevada RCV system or the kind of "top-three" system described in more detail below, in which voters directly mark their preference for each pair of candidates.

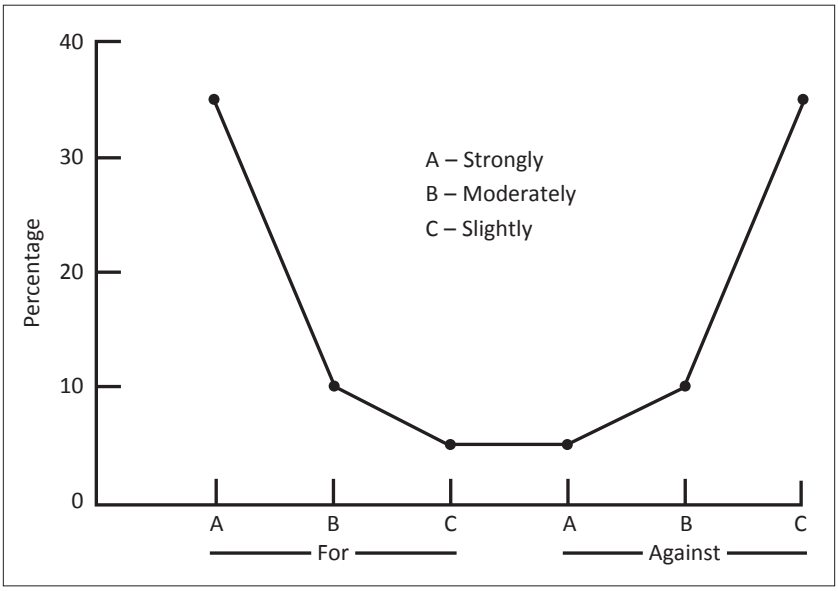
Moreover, if the goal is to counteract the overrepresentation of extremism, it is essential to replace partisan primaries with the kind of nonpartisan primary used in the Alaska-Nevada system or the "top-three" variation: combining RCV with partisan primaries, as Maine does, cannot counteract the election of extremists if the electorate itself is highly polarized—unless the tabulation method of RCV is MPV instead of LPR (and even then, partisan primaries are likely to disadvantage candidates for major-party nomination who are more "moderate" in that they are closer to the median voter in the state or district).

The Challenge of Partisan Polarization for an Electoral Democracy

Scholars of democracy have long understood that when a polity is evenly yet extremely divided—with almost half of voters at each polar opposite and very few voters in the middle—sustaining government through traditional electoral procedures becomes exceedingly difficult. Robert Dahl, perhaps the preeminent theorist of democracy in the United States during the second half of the twentieth century, made this point in *A Preface to Democratic Theory*, first published in 1956 and reissued fifty years later with additional reflections from the author. Figure 2.1 presents Dahl's visual representation of this situation.

Dahl was pessimistic about democracies' capacity to handle this type of division: "Where each side is large and each regards the victory of the other as a fundamental threat to some very high ranked values, it is rea-

Figure 2.1 Visual Representation of Extreme Political Polarization



Source: Robert Dahl, *A Preface to Democratic Theory (*Chicago: University of Chicago Press, 2006).

sonable to expect serious difficulties in the continued operation of a [democratic] system," he wrote.[12] Dahl worried that this situation could lead to revolution, secession, or other disruptions negating the "legitimacy" of the existing regime—including in the United States, which is the country Dahl had primarily in mind. Viewing the American Civil War as an example of this circumstance, Dahl doubted that any "constitutional machinery" could cope with such a "profoundly rooted social conflict."[13]

A year after Dahl made that observation, Anthony Downs made a similar point in his seminal 1957 study, *An Economic Theory of Democracy*.[14] Downs was also pessimistic about the capacity of a conventional plurality-winner electoral system to remain intact when it has become so divided. "In a two-party system," he wrote, "whichever party wins will attempt to implement politics radically opposed to the other party's ideology, since the two are at opposite extremes." Thus, he continued, "government policy will be highly unstable and"—even worse—"democracy is likely to produce chaos." Like Dahl, Downs predicted that "this situation may lead to revolution."[15] Whether or not Downs was focused specifically on the US system (or instead thinking more about a parliamentary

system such as Britain's), and whether or not he should be understood as exclusively describing a pattern of oscillating gyrations (rather than one also encompassing the kind of cataclysmic regime collapse that occurred during the American Civil War), it is clear that Downs, like Dahl, did not believe this kind of highly polarized bimodal distribution of the electorate was sustainable in a democracy.

With the sobering analysis of Dahl and Downs in mind, it is worth exploring whether there are forms of electoral innovation that might ameliorate or forestall a dire situation of this nature. Electoral institutions interact dynamically with the political culture in which they exist. Political scientists speak of electoral institutions having "centrifugal" or "centripetal" tendencies.[16] Centrifugal institutions pull people apart, exacerbating or accelerating polarization that already exists in society for cultural reasons. Centripetal institutions, by contrast, tend to depolarize society, pushing politics back toward the center. In fact, it is possible to develop a simple measure of an electoral system's centripetal, or depolarizing, tendency. We can call this measure an electoral system's *centripetal force*, or C-force for short, and define it as $1 - w/v$, where v is the average distance (as an absolute value) of each voter from an electorate's median voter, and w is the average distance (as an absolute value) of each winner from an electorate's median voter.[17] Where $w = v$, meaning that winners on average are no more or less extreme (distant from the median voter) than the voters themselves are on average, the C-force of the electoral system is zero. It has no positive tendency to yield winners less polarized than the electorate but also no negative tendency to yield winners more polarized than the voters themselves. By contrast, where $w < v$, meaning that winners on average are closer to the electorate's median voter than the voters themselves are on average, w/v is less than 1, and the electoral system has a positive C-force (greater than zero). The larger a system's C-force, the more depolarizing it is—producing winners closer to the electorate's median voter. If all the winners in an electoral system are exactly congruent with the electorate's median voter, then w/v is zero and the electoral system has a perfect C-force of 1. Conversely, if $w > v$, meaning that winners on average are further from the electorate's median voter than the voters themselves are on average, then w/v is greater than 1, and the electoral system has a negative C-force, indicating that it has a centrifugal (polarizing) effect. It "overrepresents" extremism, to invoke the terminology of the task force's mission statement.

Compared to mid-twentieth century, the United States today is experiencing much greater partisan polarization—a trend that has worsened from one decade to the next, to the point where American politics is increasingly characterized by the deep enmity that each side of the par-

tisan divide has for the other.[18] Both sides view victory by the other as the kind of "existential threat" that Dahl feared. Although the fifty states vary in their degree of partisan polarization, as well as in their competitiveness (with some "purple" states evenly divided between "red" and "blue" and others leaning to varying degrees one way or the other), the overall character of national electoral competition is fierce, as it is in the most competitive states like Arizona, Wisconsin, or Pennsylvania. In these purple states, it would be a mistake to think that voters are all clumped in the middle—purple themselves, so to speak. Rather, they have drifted far apart in the degree of their partisan leanings, although they are not as polarized as their elected representatives. Consequently, in a 50–50 purple state, a slight shift can result in the election of candidates who are unacceptable to nearly half the electorate.[19] (Depending on its electoral system, an electorate that leans red or blue can end up lurching even further toward the extreme than the median voter in that electorate.[20]) In this context, considering whether a particular type of electoral system would have a centripetal tendency, producing an electoral system with a larger (and positive) C-force, is an undertaking of value.

This chapter specifically addresses elections for a single office. Some elections are necessarily of this nature, such as those for governor or other statewide executive offices, including secretary of state and attorney general. Each US senator is also elected this way. So too are members of the US House of Representatives, although—as considered in Chapters 3 and 4—it would be possible to introduce a system of proportional representation for elections to the House (except in states that have only a single member). Most elections for seats in state legislatures are also single district-by-district races,[21] although these too could move to a system of PR.

Therefore, the analysis in this chapter serves two functions. First, it explores possible electoral reforms to address partisan extremism in elections for which PR is not an option, such as those for governor or US senator. Second, it explores electoral reforms that might reduce the potency of partisan extremism for single-seat offices such as those in the US House of Representatives or state legislatures, in the event that PR is not a desired or achievable reform.

This chapter does not specifically address how partisan gerrymandering—or even the "natural" gerrymandering that occurs as a result of sharp political differences reflecting geography (urban, suburban, rural)—amplifies the problem of partisan extremism that can occur in single-seat elections.[22] Even in a purple state that is evenly split between Democrats and Republicans, such as Arizona, Georgia, or Wisconsin, some urban districts will be deep blue and some rural districts will be deep red.

In addition, primary elections in these "extreme" districts can accentuate extremism even further, since the general election will not be a competitive check on the outcome of the primary, as it would be in a purple district or a statewide election.[23] Chapter 5 specifically addresses the issues of primaries. Here, the main focus will be a statewide election that even in a 50–50 purple state can be susceptible to the problem of political extremism depending on the electoral system.[24] (The same analysis also holds for 50–50 purple districts, whether the state is purple, red, or blue.)

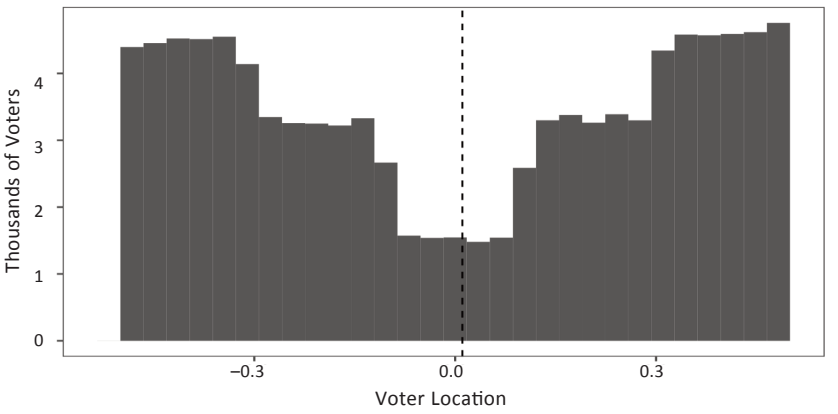
Introductory Background

Below are current partisan profiles of the electorates of several US states for illustrative purposes.[25] Arizona is a 50–50 purple state that is highly polarized, with many deep-blue and deep-red voters (those scoring near −0.4 or +0.4 on the partisanship scale), fewer moderately blue and red voters (those scoring near −0.2 or +0.2), and still fewer purely purple centrist voters (scoring near 0.0), as shown in Figure 2.2.

Pennsylvania is a highly polarized purple state with even fewer centrist voters (see Figure 2.3).

Georgia, Michigan, Nevada, and Wisconsin (the other proverbial battleground states in recent statewide and presidential races) are also polarized to varying degrees (see Figures 2.4 to 2.7).

Figure 2.2 Arizona Simulated Voter Population



Other states have relatively high levels of partisan polarization but overall lean red or blue and are therefore not purple swing states. Examples of especially polarized red states are Mississippi and South Carolina (see Figures 2.8 and 2.9).

Polarized blue states include Delaware and Illinois (see Figures 2.10 and 2.11).

The simplest measure of partisan polarization for a state's electorate is the average distance of all its voters from its median voter. The larger

Figure 2.3 Pennsylvania Simulated Voter Population

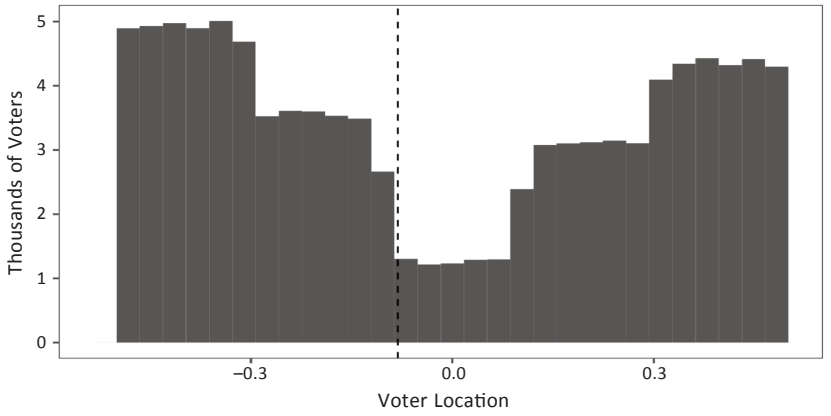
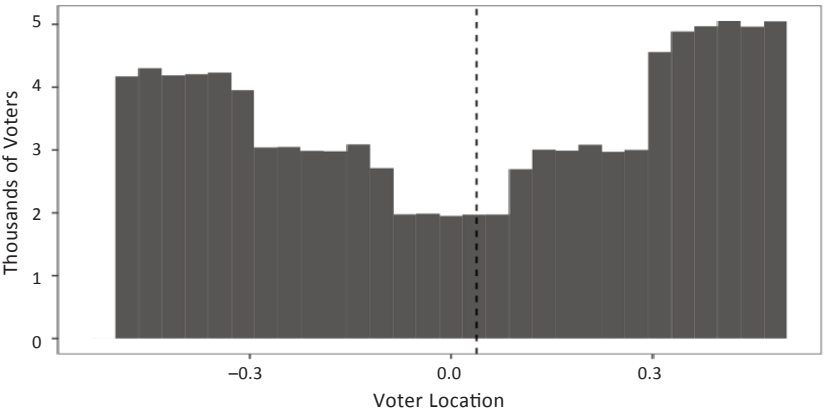


Figure 2.4 Georgia Simulated Voter Population



this average distance, the greater the polarization, and vice versa. States with the lowest levels of partisan polarization include Vermont and Hawaii, deep-blue states (see Figures 2.12 and 2.13), and Wyoming, a deep-red state (see Figure 2.14).

Given this partisanship data for all fifty states, we can imagine candidates occupying five different partisan positions, or "lanes," in an effort to appeal primarily to five different groups of voters or segments within the electorate:

Figure 2.5 Michigan Simulated Voter Population

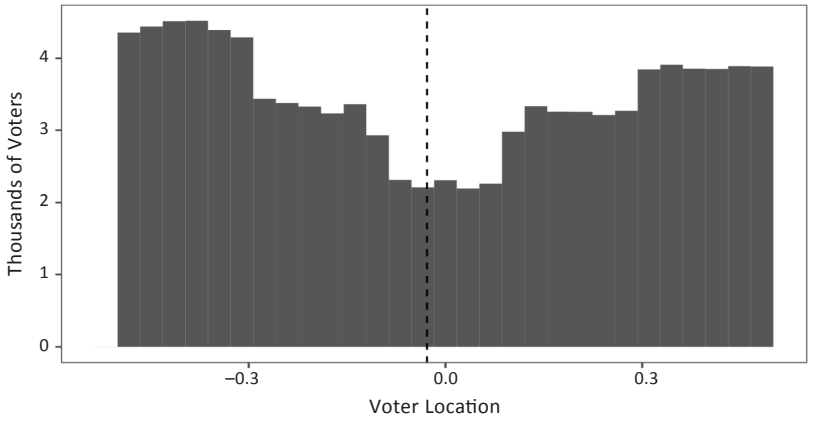
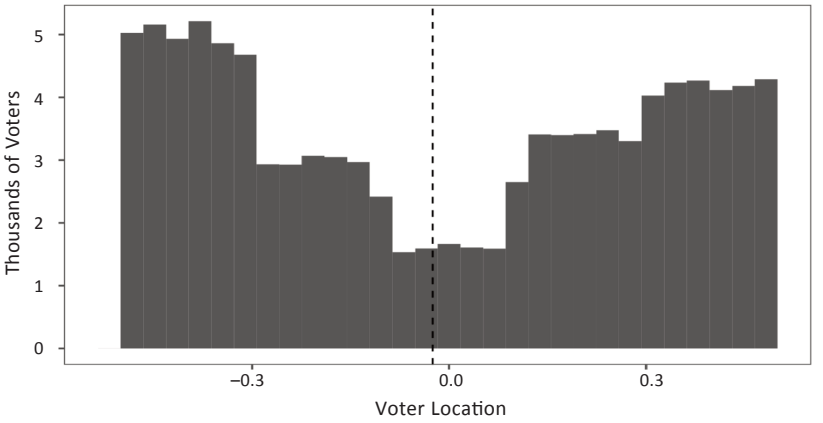


Figure 2.6 Nevada Simulated Voter Population



Ultramarine: intense Democratic partisanship (around −0.4)
Blue: average Democratic partisanship (around −0.2)
Purple: centrist independent (around 0.0)
Red: average Republican partisanship (around 0.2)
Scarlet: intense Republican partisanship (around 0.4)[26]

In addition to corresponding usefully to voter segments in state electorates, this breakdown of candidate "lanes" facilitates analysis of a

Figure 2.7 Wisconsin Simulated Voter Population

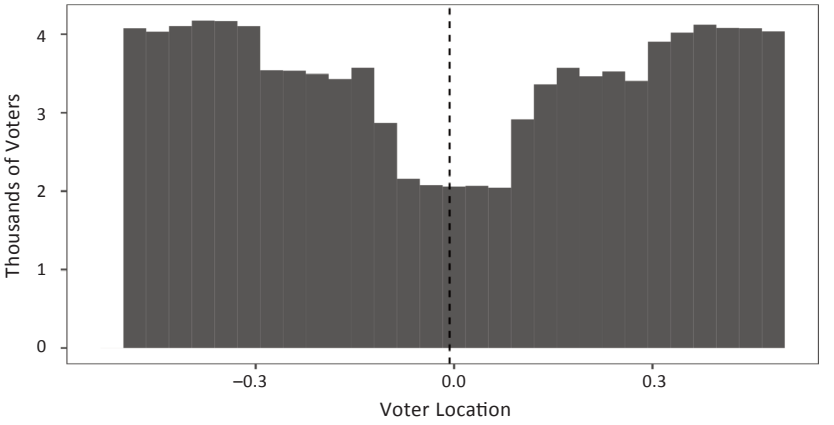
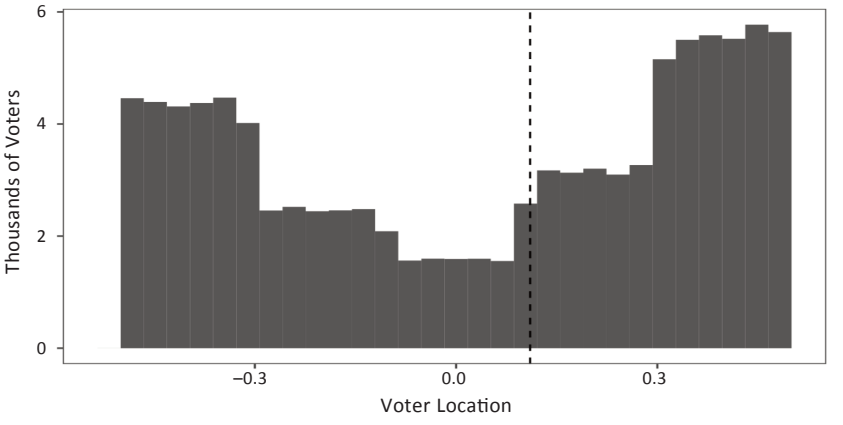


Figure 2.8 Mississippi Simulated Voter Population



leading electoral-reform proposal: the "final-five" system currently under consideration in Nevada.[27] As noted above, if adopted in a second vote in November, Nevada's new system will use a nonpartisan primary in which the top five candidates advance to the general election, where the lowest-plurality runoff form of ranked-choice voting identifies the winner. We can thus consider how various alternatives based on Nevada's model would handle an election involving five candidates, one occupying each of these five partisan lanes, depending upon how polarized the electorate is.

Figure 2.9 South Carolina Simulated Voter Population

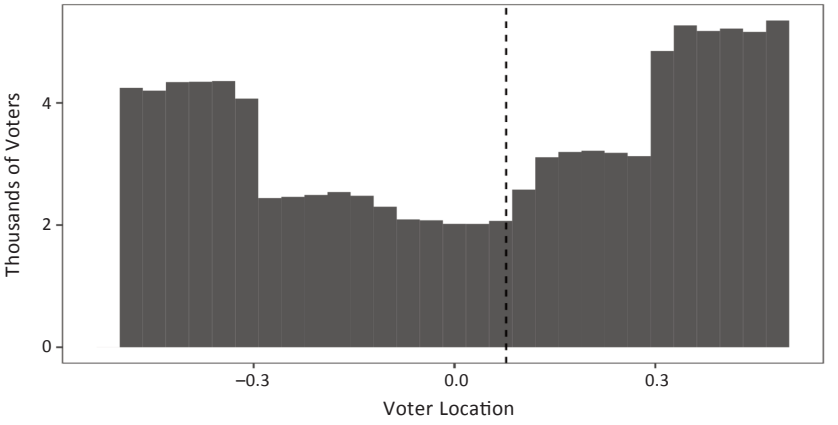
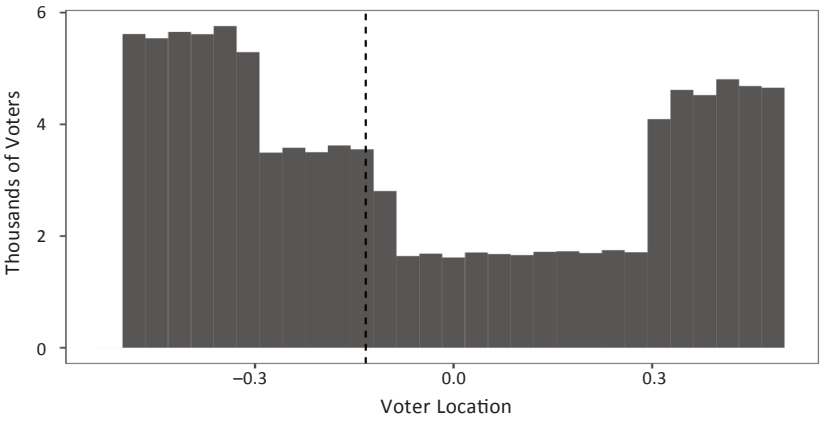


Figure 2.10 Delaware Simulated Voter Population



Before we undertake this comparison of alternative electoral methods based on Nevada's model, it is important to point out that the conditions of American electoral competition have not always been so polarized. The electoral system used in most states for decades—partisan primaries followed by plurality-winner general elections—worked successfully when partisan polarization was lower. That same electoral system, however, may not be capable of performing as well now that conditions have changed.

Figure 2.11 Illinois Simulated Voter Population

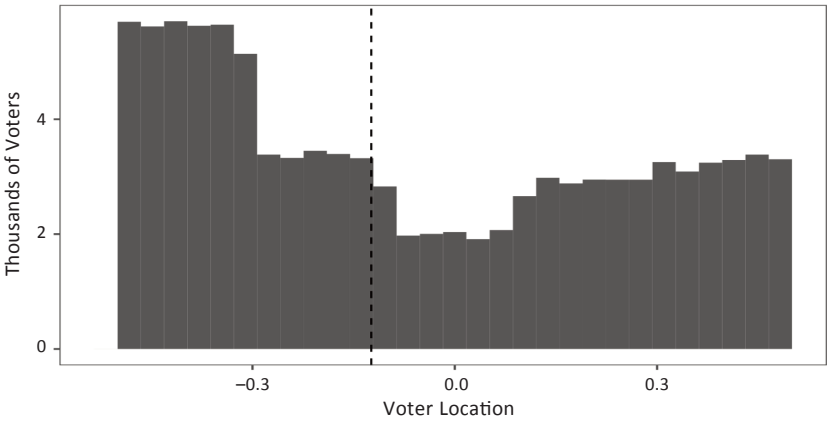
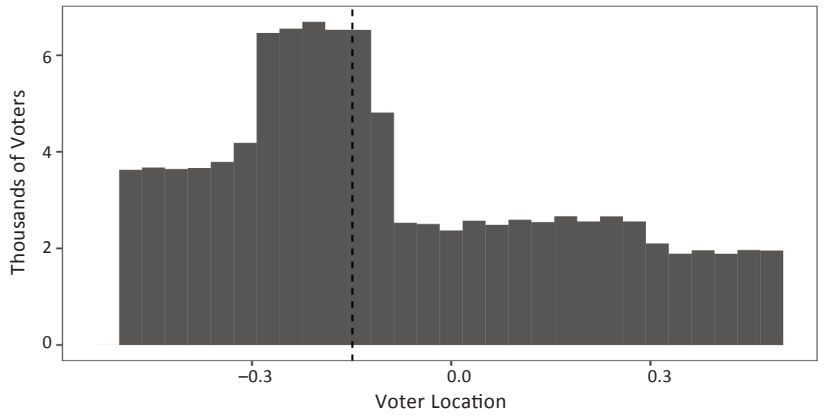


Figure 2.12 Vermont Simulated Voter Population



Historically, electoral competition in the United States has been between two of the five positions identified above: moderately blue Democrats and moderately red Republicans. Moreover, the gap between these two positions has been relatively narrow. To use an old football analogy, American politics is played between the forty-yard lines (or between −0.1 and +0.1 on the partisanship scale for each state's electorate profile).

When there is relatively little partisan distance between Democratic and Republican candidates and most voters view themselves as aligned

Figure 2.13 Hawaii Simulated Voter Population

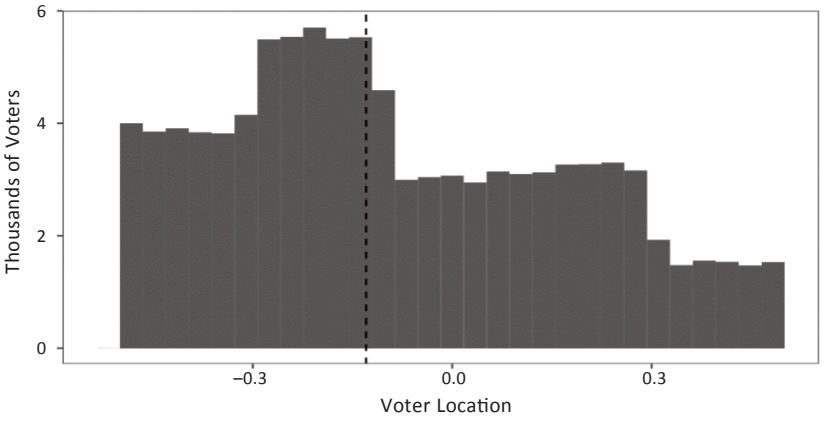
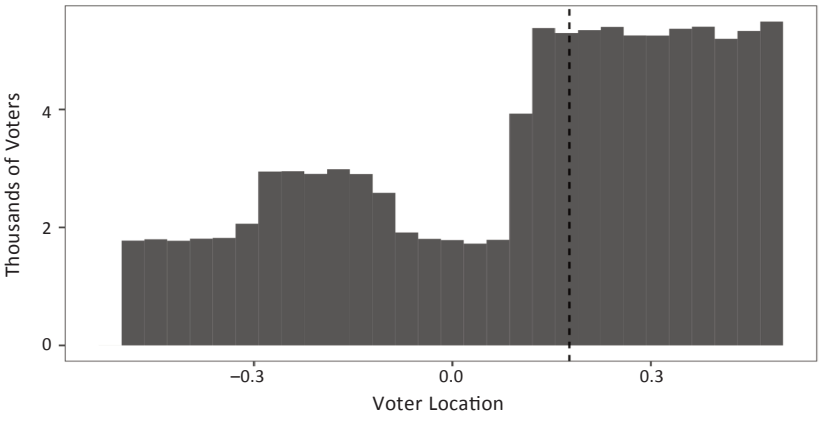


Figure 2.14 Wyoming Simulated Voter Population



with one or the other (or relatively indifferent to both), then the traditional electoral system of partisan primaries followed by a plurality-winner general election works reasonably well to represent the collective preferences of voters fairly.[28] In this situation, if the state has a 50–50 purple electorate overall, the Democratic primary will nominate a moderately blue candidate not far from the purple center of the electorate, and the Republican primary will likewise nominate a moderately red candidate not far from the electorate's center. The winner of the general election will then be whichever of these two nominees can attract more votes from the truly centrist (purple) voters who are willing to go with one side or the other depending on the specific circumstances of the election.[29]

But regardless of which way the election goes, the winner will not be too far from voters on the losing side. A victory on one forty-yard line is always a mere twenty yards from the voters clumped together at the other forty-yard line. We can visualize this "low-polarization" scenario (see Figures 2.15 and 2.16), which prevailed in the United States for many decades after World War II, by simulating 100,000 elections conducted in the traditional method of a simple plurality-winner general election following two separate primaries for the two major parties.[30]

This visualization shows the winners staying within the proverbial forty-yard lines. In this case, the electoral system has a C-force of 0.374—meaning when the level of polarization in the electorate is relatively low, the traditional method of partisan primaries followed by a plurality-winner general election will have a moderating, "centripetal" effect. At least, it won't produce winners who on average are further from the median voter than the voters themselves are. Here, $w = 0.732$, while $v = 1.169$.

In this scenario, moreover, there are not enough pure centrists to form a third "Moderate" party to compete against the center-left Democrats and center-right Republicans. Instead, they must decide whether they wish to support one side or the other, with the understanding that they can always switch sides in the next election. We can illustrate this point with a simple example. Suppose 45 percent of the electorate aligns with the center-left Democrats (either as party members or simply in terms of their fairly consistent electoral preferences),[31] and suppose another 45 percent aligns with center-right Republicans (again, either as party members or in terms of stable electoral preferences), leaving only 10 percent as truly unaligned centrists. These pure middle-of-the-roaders might prefer to have their own candidate to support, rather than having to choose a center-left Democrat or a center-right Republican, but few would think the electoral system unfair insofar as it forces this 10 percent of the

Figure 2.15 Low-Polarization Swing Electorate

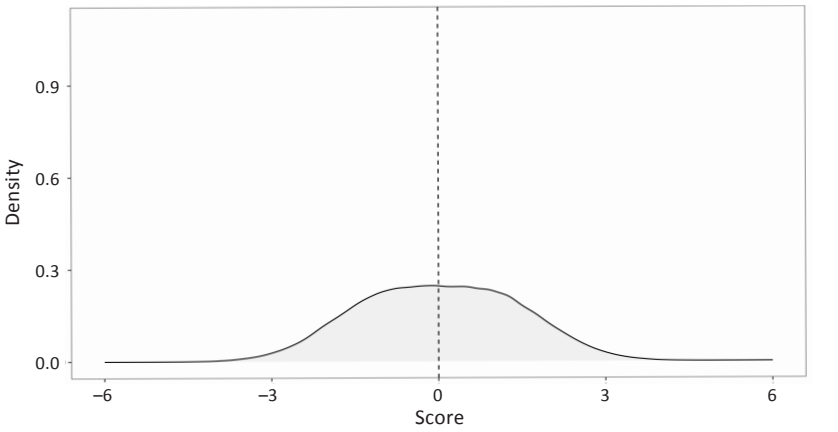
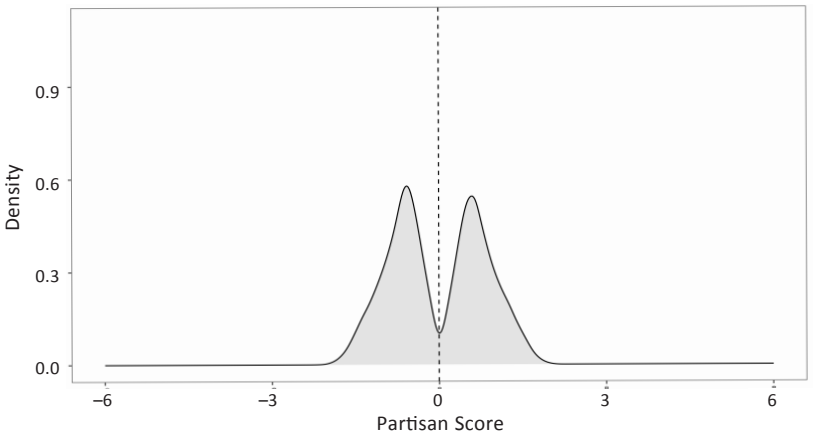


Figure 2.16 Plurality Winner Distribution, Low-Polarization Electorate



electorate to make a choice between candidates who represent the 45 percent on one side or the other.

Not all of this 10 percent will make the same choice. Some will go with the Democrats and some with the Republicans. In a very tight election, the split within the 10 percent may be close to 50–50, which in turn will make the overall electoral outcome close to 50–50. Moreover, if in one year the 10 percent splits 60–40 for the Democrats, then the Democrats will win 51–49; and if in the next election the 10

percent split 60–40 in the opposite direction, then the Republicans will win 51–49.

So long as the partisan distance between Democrats and Republicans is relatively narrow and politics is played between the forty-yard lines, then this pattern of alternating victories between the two parties is a sign of healthy electoral competition. The policy positions of elected representatives will not lurch wildly from one extreme to the other but rather tack back and forth in modest increments as the center of the electorate moves marginally to the left or right in response to changing conditions.

The Problem of Increasing Polarization

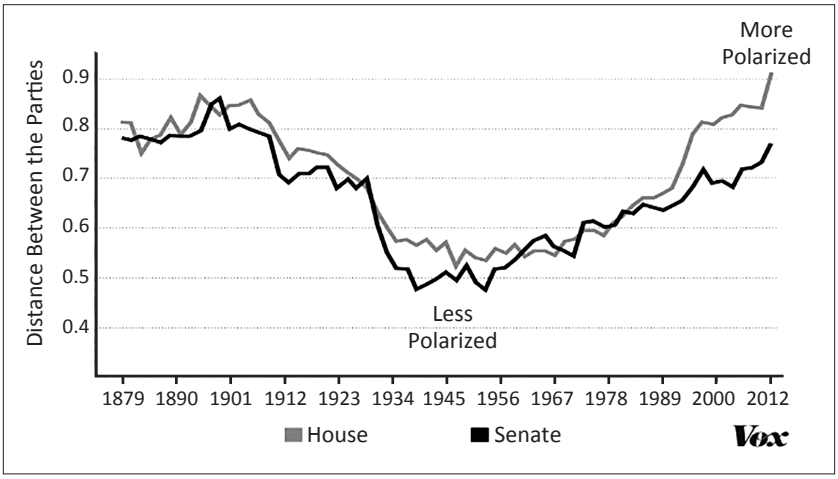
Such was the basic construct of American politics from mid-twentieth century until recently. The Democratic Party of Harry Truman and the Republican Party of Dwight Eisenhower were not so far apart. Indeed, the postwar period from 1945 to 1960 was the lowest point of partisan polarization in US history, at least since the end of Reconstruction (see Figure 2.17).[32]

In the Truman-Eisenhower era, there was no need, or even room, for a centrist party between the Democrats and Republicans. The same was true of the Democratic Party of John Kennedy and the Republican Party of Richard Nixon. Indeed, even as late as the presidential election of 2000, when Democrat Al Gore ran against Republican George W. Bush, the gap between the two major-party candidates was relatively narrow. Despite the so-called Reagan Revolution, which had moved the Republican Party to the right, and the perception prior to Bill Clinton's election that the Democratic Party had moved too far left, at the turn of the century electoral competition within the United States was still largely within the forty-yard lines.

Increasingly, however, this traditional construct is breaking down.[33] Polarization has pulled members of the two parties further and further apart to the point where each side sees the other as an "existential threat" to the nation.[34] This kind of "affective" polarization, or partisan "tribalism," means that members of Team Blue and Team Red often view team loyalty as more important than policy positions.

The partisan polarization of the electorate has been accompanied by an even greater partisan polarization among members of Congress. As the data and analysis that follow suggest, there is reason to believe that the existing electoral system—partisan primaries followed by

Figure 2.17 Party Polarization, 1879–2012



Sources: Vox; Voteview.com and DW-NOMINATE scores.
Note: Each line depicts the degree of polarization in each chamber of Congress over time.

plurality-winner general elections—is to blame for this trend.[35] Moreover, one consequence of this magnified partisan polarization is that each side of the electorate fears that the other will gain power. Unlike in the past, when slight shifts within the electorate would lead to officeholders tacking incrementally in either direction—keeping government policy well within the forty-yard lines—in today's polarized environment, a slight shift within the electorate in either direction can cause a pronounced swing from one partisan extreme to the other.

Who Represents the Middle if the Two Parties Have Polarized?

As the two parties have polarized, a gap has grown in the center. The election of members of Congress who are more intensely blue and, to an even greater extent, red than their constituents—more "ultramarine" and "scarlet"—has meant that more moderately blue and red voters have started to feel less represented (especially on the Republican side).[36] This creates an opening for a third "purplish" party to form between the Democrats and Republicans and attempt to capture these disaffected voters who see themselves as more moderate than what the two major

parties have become.[37] Indeed, it is commonplace now to hear former Republicans talk of being politically homeless as a consequence of their former party moving sharply to the right. Correspondingly, there is increasing talk of the Republican Party becoming divided into its new MAGA and old GOP wings.[38]

Suppose that as a result of polarization, a 50–50 state has a choice of three candidates: an ultramarine Democrat, a scarlet Republican, and a purplish independent (or nominee of a new third party attempting to fill the gap that has grown between the two major parties). Let's imagine reliable polling shows that in this race, the ultramarine Democrat is the favorite of about 35 percent of the electorate, as is the scarlet Republican, with the purplish independent the first choice of a coalition of moderate Democrats, Republicans, and independent voters amounting to the remaining 30 percent of the electorate. We can envision the purplish independent candidate as drawing support from all the voters who remain within the proverbial forty-yard lines, while the ultramarine and scarlet candidates are backed by those voters who have moved further toward the partisan (or "tribal") end zones along with the nominees of their parties.[39]

Suppose the reliable polling also shows that, because of affective polarization and the tribalism of contemporary politics, the supporters of each major-party candidate strongly oppose the election of the opposing major-party candidate. Thus, the 35 percent of the electorate that wants the ultramarine Democrat to win also really doesn't want the scarlet Republican to win—and vice versa. This means, as the polling also reveals, that if the election were a one-on-one contest between the purplish independent and either of the two major-party nominees, the purplish independent would win decisively, by about 65 to 35 percent (or almost two-to-one). In other words, virtually all the voters who prefer the ultramarine Democrat would readily vote for the purplish independent over the scarlet Republican. Likewise, virtually all those who prefer the scarlet Republican would choose the purplish independent over the ultramarine Democrat.

Given this polling data—assuming it's reliable—which candidate should win the election? As discussed later in this chapter, it is possible to design a "top-three" electoral system that would permit voters to cast ballots expressing their preferences among each possible pair of these candidates: ultramarine Democrat versus scarlet Republican, ultramarine Democrat versus purplish independent, and scarlet Republican versus purplish independent. This system would declare as the winner the candidate who beats each of the other two in their one-on-one ballot

match-ups.[40] As long as voters cast their ballots in line with the polling, the purplish independent would win in this case.

But that is not the result the existing electoral system would produce. Instead, either the ultramarine Democrat or the scarlet Republican would win, given the plurality-winner (often called "first-past-the-post") general election system in most states, depending on which of the two major-party candidates manages to finish slightly ahead of the other. As long as the purplish independent candidate has a ceiling of first-choice support of about 30 percent—because of tribal polarization—this candidate cannot win in a first-past-the-post system. Indeed, the purplish independent is likely to drop out of the race, or not even run in the first place, because of their inability to compete in the plurality-winner system. This is true even though the same candidate would easily clobber either of the other two in one-on-one contests.[41]

We can visualize this with a model of a highly polarized 50–50 electorate (see Figure 2.18) and the winners of 100,000 simulated elections using the existing plurality system (see Figure 2.19).

With relatively fewer voters in the middle, there are virtually no winners in the middle—and this is true even assuming that voters in each of the two major-party primaries perfectly mirror their half of the overall electorate. With this assumption, the plurality system has a C-force close to zero for this highly polarized electorate, 0.1060, meaning that the system has virtually no capacity to yield winning candidates closer to the center than the voters themselves. But if we assume instead that each of the two parties' primary voters are more partisan than their half of the overall electorate, then the C-force of the existing plurality system actually becomes negative: winners of the general election on average are more distant from the electorate's median voters than the voters themselves are.[42] In other words, if voters in the Democratic Party's primary are more ultramarine on average than the blue half of this 50–50 electorate, and likewise the Republican Party's primary voters are more scarlet than the red half of the electorate, then the general election's winners will tend to be more ultramarine or scarlet than the general election's voters. This negative C-force causes extremists to be overrepresented in office.

One implication of this analysis might be that it is necessary to reform major-party primaries to make them as congruent as possible with each half of the overall electorate. Considering potential reforms along these lines is the subject of Chapter 5. Here it is necessary to wrestle with a more basic question: Even if we could make the existing system have a C-force close to zero, as in the model case where the

combined electorates of the two primaries matched exactly the electorate as a whole, would we still have a sound electoral system for a highly polarized electorate (as, even in this situation, depending on how polarized the electorate is, it will still produce winners who are further and further from the center)?

Figure 2.18 High-Polarization Swing Electorate

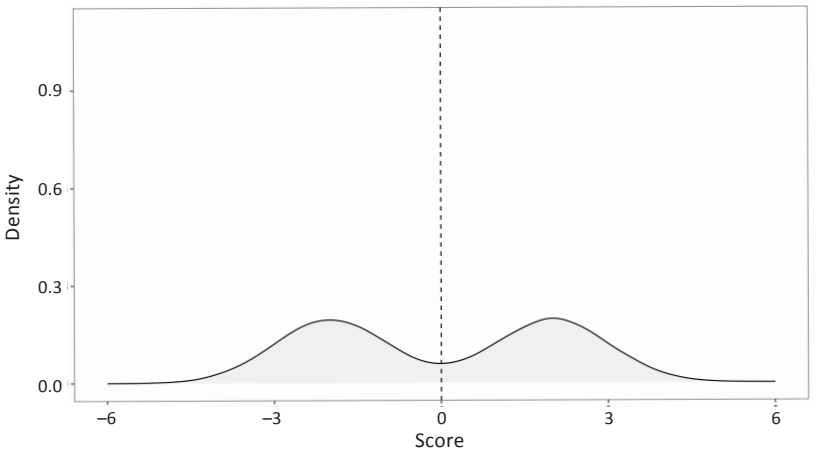
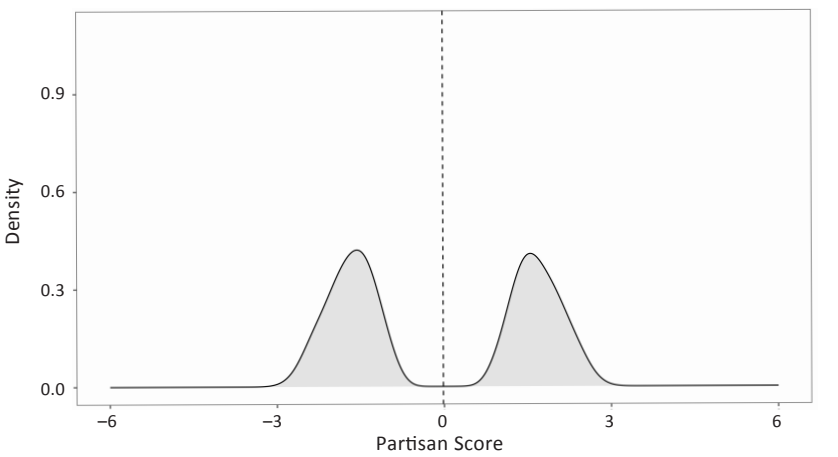


Figure 2.19 Plurality Winner Distribution, High-Polarization Swing Electorate



To return to the hypothetical three-candidate example, suppose that the 30 percent of voters who prefer the purplish independent see it as in their interest to vote in either the Democratic or Republican primary, since their favorite candidate can't win the first-past-the-post general election. Let's assume in this 50–50 state that half of these voters join one primary and half join the other. In this situation, the purplish independent would be unable to beat either the ultramarine Democrat or the scarlet Republican one-on-one in their party's primary. The 35 percent of the electorate whose favorite candidate is the ultramarine Democrat will crush the purplish independent in the Democratic primary. Likewise, the 35 percent of the electorate whose favorite candidate is the scarlet Republican will crush the purplish independent in the GOP primary. Indeed, even if all 30 percent of the electorate who prefer the purplish independent vote in either major party's primary, their candidate will not prevail, assuming that all 35 percent who support the ultramarine or scarlet candidate turn out to vote in their party's primary. In other words, even if the two major-party primaries work perfectly to represent each half of the overall electorate, under conditions of increasing partisan polarization, the prevailing electoral system will produce two polarized major-party nominees: an ultramarine Democrat and a scarlet Republican. This forces all voters to make a choice between these two more extreme alternatives, even though the electorate as a whole in the general election would much prefer a purplish independent over either of the two polarizing major-party nominees.

If PR were possible, each segment of the electorate could be given seats in the legislature in proportion to its share of votes. But in this chapter, we are considering those offices that cannot be elected on the basis of PR, such as US senator or governor. So, what would be the best way to elect the winner of a single statewide office in this circumstance?

Searching for a More Centripetal Electoral System

As we have seen, the conventional plurality-winner system will not elect a broadly acceptable compromise candidate under conditions of high polarization. In this system, moreover, it does no good to come in second. Even if a purplish independent or third-party candidate could manage to poll ahead of one of the major-party nominees, the result would be no different than finishing behind both of them. For example, imagine that in the hypothetical three-way race, the scarlet Republican finishes first with 35 percent, the purplish independent second with 34

percent, and the ultramarine Democrat third with 31 percent. In the plurality-winner system, the scarlet Republican wins regardless of which opponent comes in second.

In an alternative electoral system, however, a more broadly acceptable moderate could be elected if that candidate managed to come in second. One alternative is the "top-two" system used in California (which Georgia also uses for runoff elections if no general election candidate receives a majority of the vote).[43] In a situation such as the one described above where the scarlet Republican and purplish independent are the top two candidates, the purplish independent would prevail in the California general election or Georgia runoff by picking up second-choice support from the voters who preferred the ultramarine Democrat the most. (France's 2022 presidential election was almost a version of this. The top three candidates in the first round were centrist Emmanuel Macron with 28 percent, far-right Marine Le Pen with 23 percent, and socialist Jean-Luc Melenchon with 22 percent. In the final round, Macron picked up most of Melenchon's support, trouncing Le Pen 59 percent to 41 percent. Even if in the first round Macron had finished slightly behind Le Pen, he would have pulled ahead of her in the final round by picking up enough support from Melenchon's first-round voters.[44])

Similarly, the lowest-plurality runoff version of ranked-choice voting used in Alaska and Maine will elect a compromise moderate who has the second-highest number of supporters.[45] RCV permits voters to rank their preferences among all the candidates. Under the LPR system, if no candidate wins a majority of first-preference votes, the candidate with the fewest first-choice votes is eliminated, and the votes for that candidate are redistributed to their voters' second preferences. (LPR is sometimes called instant-runoff voting [IRV], even though the term "instant runoff" can be applied to other tabulation methods for the ranked-choice ballots, as discussed below.) As long as the moderate candidate is ranked at least second, he or she will prevail.

The 2022 Alaska state senate race involving Republican Cathy Giessel is a close approximation of this scenario. Giessel had lost her seat to further-right Roger Holland in the 2020 Republican primary election. Then in 2022, under the new "top-four" RCV system, she placed slightly ahead of Holland in first-preference votes, with the Democrat slightly trailing in third place. Even if she had finished behind Holland, however, she would have prevailed because of the second-choice support she received from the voters who ranked the Democrat first.[46]

Alaska's 2022 US Senate race also illustrated this basic point. Moderate Republican Lisa Murkowski finished slightly ahead of Kelly Tshibaka, who was endorsed by Donald Trump, in the first round of the state's new "instant-runoff" system: Murkowski had 43.4 percent, Tshibaka 42.6 percent, and the third-place Democrat 10.7 percent.[47] But even if Murkowski had finished slightly behind Tshibaka in the first round, Murkowski would have pulled ahead because she received the most second-choice votes from the Democrat's supporters.

The capacity of a second-place moderate to win in either the "top-two" or LPR systems is a reason to prefer these systems to the traditional plurality-winner system as a way to counteract extremist winners. Whereas the plurality-winner system will let a polarizing candidate on the far right or far left prevail as long as he or she finishes first (even with barely more than a third of the votes), the "top-two" and LPR systems will elect the more broadly acceptable moderate (so long as he or she has the second-most first-choice votes and can pick up enough second-choice voters who preferred the eliminated third-place candidate).

Recall the model case of an electorate with relatively low polarization. In this context, Alaska's new electoral system—a nonpartisan "top-four" primary with LPR in the general election—will tend to produce winners closer to the electorate's median voter than will a plurality-winner general election after partisan primaries (see Figures 2.20 and 2.21).

In 100,000 simulated elections with each of these two systems, the plurality-winner system (as mentioned above) yielded winners who on average had a distance from the median voter of 0.732. By contrast, Alaska's system yielded winners with an average distance from the median voter of 0.565—meaning that these winners tended to be closer to the center. This difference in the value of w, in turn, meant that the two electoral systems had a different C-force for the same electorate. Whereas the plurality-winner system had a C-force of 0.374 (assuming primary voters mirror exactly general election voters), Alaska's system had a higher C-force of 0.517.

These alternative electoral systems have a weakness, however. Neither the "top-two" system nor the LPR system will counteract severe polarization and avoid the election of an extreme candidate if the more moderate candidate finishes third, behind candidates on both the extreme right and extreme left, rather than second. In a highly polarized 50–50 electorate, with a bimodal distribution that has a hollowed-out center, this is very likely to be the case.[48] Indeed, Alaska's LPR system does no better than the plurality-winner system in elect-

Figure 2.20 Plurality Winner Distribution, Low-Polarization Electorate

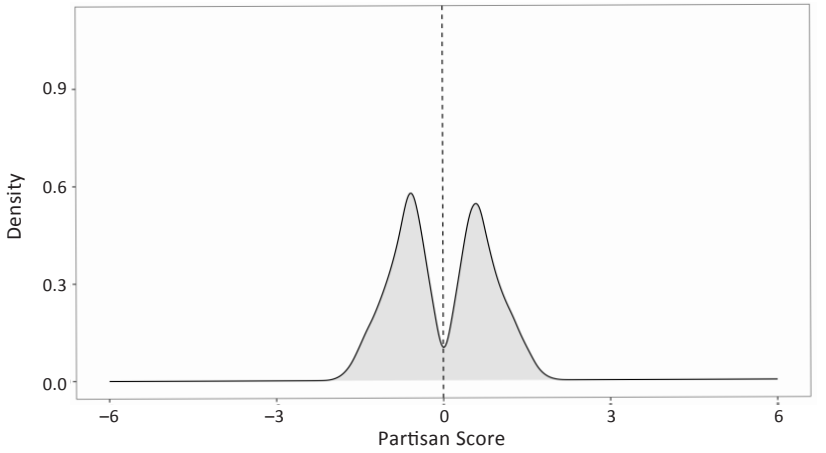
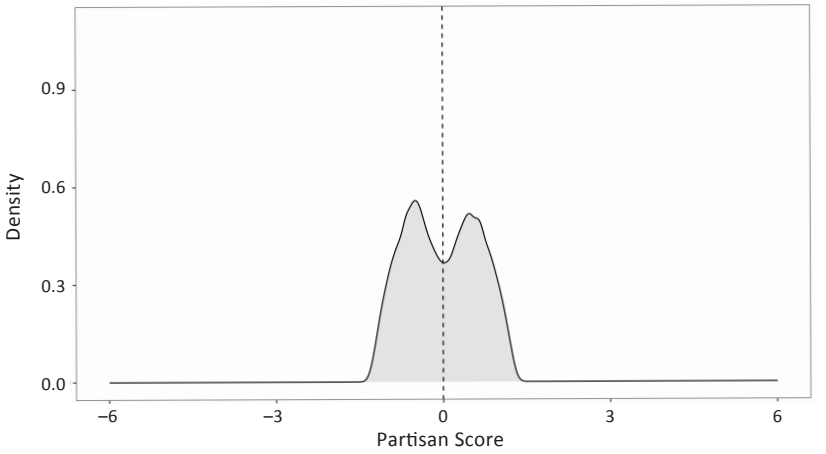


Figure 2.21 LPR Winner Distribution, Low-Polarization Electorate



ing more centrist candidates when simulating 100,000 elections in a model highly polarized 50–50 electorate, as demonstrated in Figures 2.22 and 2.23.

As we have already seen, for this electorate, the plurality-winner system has a C-force close to zero (0.160) when voters in the two party primaries combined are identical to the voters in the general election. (The system's C-force, again, is negative if the voters in the

Figure 2.22 Plurality Winner Distribution, High-Polarization Electorate

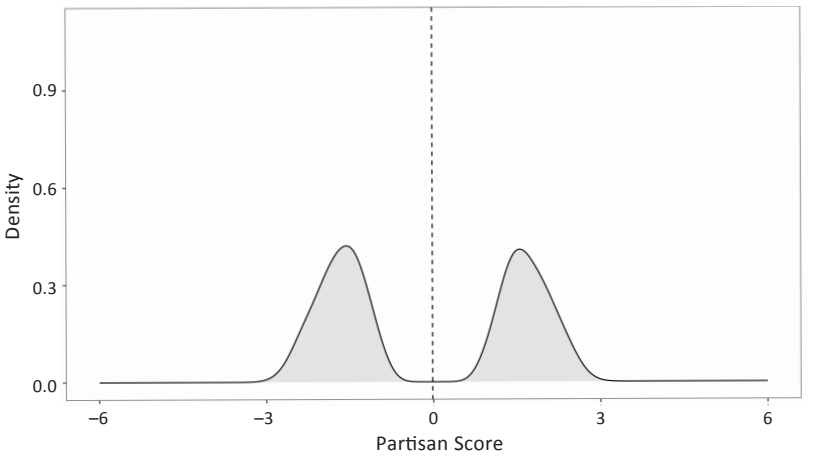
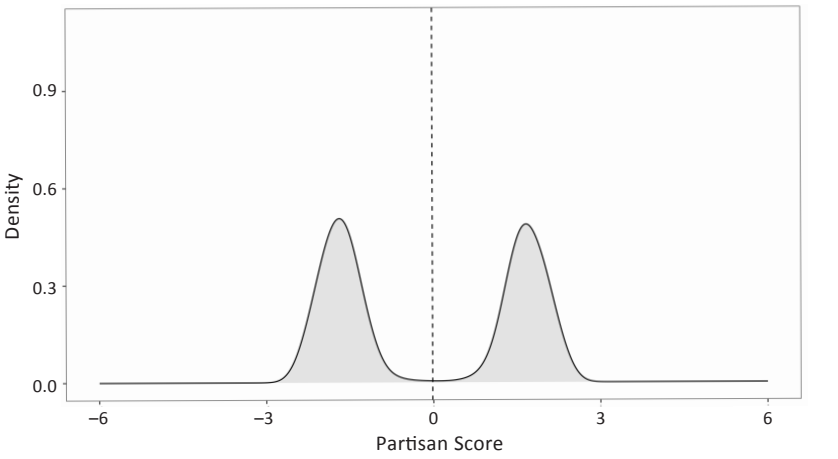


Figure 2.23 LPR Winner Distribution, High-Polarization Electorate



two primaries are more polarized than the general election voters.) Strikingly, the C-force of Alaska's LPR system is essentially the same: 0.163. In other words, using an "instant runoff" of this particular type—in which the candidate with fewest first-choice votes is eliminated—has no greater centripetal tendency in a highly polarized electorate than a plurality-winner general election as long as those voting in the primaries are not more polarized than each half of the overall

electorate. Of course, the possibility that voters in partisan primaries are more extreme than voters in nonpartisan primaries is a reason to prefer Alaska's new electoral system even if its LPR method is not especially effective in counteracting extremism.

We can confirm this general point by returning to our initial three-candidate hypothetical example. In a race where an ultramarine Democrat and a scarlet Republican both have approximately 35 percent of the first-choice votes, while the purplish independent has only around 30 percent, the LPR method will eliminate the purplish independent first, making the "instant runoff" a choice between the two polarizing nominees of the major parties.

But there are multiple electoral systems that will elect a moderate compromise candidate instead of a more extreme candidate, even if the moderate is not the first choice of most voters who are evenly split between the two more extreme candidates. Most of these alternatives are variations of ranked-choice voting that differ from the LPR procedure (although the "top-three" system described below does not use ranked-choice ballots at all). It is worth considering several of these alternatives, as no single one is generally considered the absolute best in all circumstances, and different states suffering from hyperpolarization may find different systems better suited to their particular needs.

Survivor-Style RCV

The simplest of these alternatives to explain is the same as the LPR method, except conducted in reverse order. Instead of eliminating the candidate with the fewest first-place votes, this alternative eliminates the candidate with the most last-place votes. As with the LPR method, it looks to whichever candidate is ranked next on the ballots that ranked the eliminated candidate last; in this case, next means next-to-bottom rather than next-to-top. As with the LPR method, the elimination procedure repeats until one candidate remains as the top choice on a majority of ballots (or only one candidate remains after all others have been eliminated).

Labeled the "Coombs method" in the literature on electoral systems (after the scholar who first proposed it), this system can be more descriptively called "*Survivor*-style" RCV after the well-known TV show of that name.[49] In the show, contestants are voted off the island one at a time until only one contestant—the "sole survivor"—remains. By using ranked-choice ballots, rather than multiple rounds of separate

ballots, the Coombs method is simply an instantaneous form of the *Survivor*-style elimination procedure.

Survivor-style RCV is well suited to redressing polarization when voters are motivated by a desire to prevent the election of candidates they strongly dislike and even fear.[50] This negative motivation—voting against, rather than for, a particular candidate—is almost as strong, and for many voters maybe even be stronger, than positive motivation in favor of a particular candidate. Think, for example, of all the voters whose main electoral motivation is to stop the election of Donald Trump rather than to elect any particular other candidate. *Survivor*-style RCV, because of how it structures instantaneous elimination, places special emphasis on these oppositional motivations of voters to defeat particular candidates.

We can see how *Survivor*-style RCV works with an illustration built on our previous example. Let's suppose the ranked-choice ballots are those listed in Table 2.1.

These ballots show that Purplish has 32 percent of first-choice votes, barely behind Ultramarine (with 33 percent), but still in third place. Thus, under the LPR method, Purplish would be eliminated; and because the second-choice votes of Purplish's supporters are split evenly between the two other candidates, Scarlet would win the "instant runoff" 51 to 49 percent.

Under *Survivor*-style RCV, by contrast, Ultramarine would be the first candidate eliminated based on having the largest number of last-choice votes. Ultramarine is the last choice of 51 percent of voters: the 35 percent who rank Scarlet first plus the 16 percent who rank Scarlet second after Purplish. Once Ultramarine is eliminated, Purplish wins the *Survivor*-style RCV election because he or she is now the top choice of the remaining candidates on 65 percent of ballots, which is more than the minimum majority necessary for election. (Also, after Purplish is eliminated, Scarlet is the remaining candidate with the highest number of last-choice votes—the same 65 percent.[51])

Table 2.1 Ranked-Choice Ballots to Illustrate *Survivor*-Style RCV

Percentage of Voters	First Choice	Second Choice	Third Choice
35	Scarlet	Purplish	Ultramarine
33	Ultramarine	Purplish	Scarlet
16	Purplish	Scarlet	Ultramarine
16	Purplish	Ultramarine	Scarlet

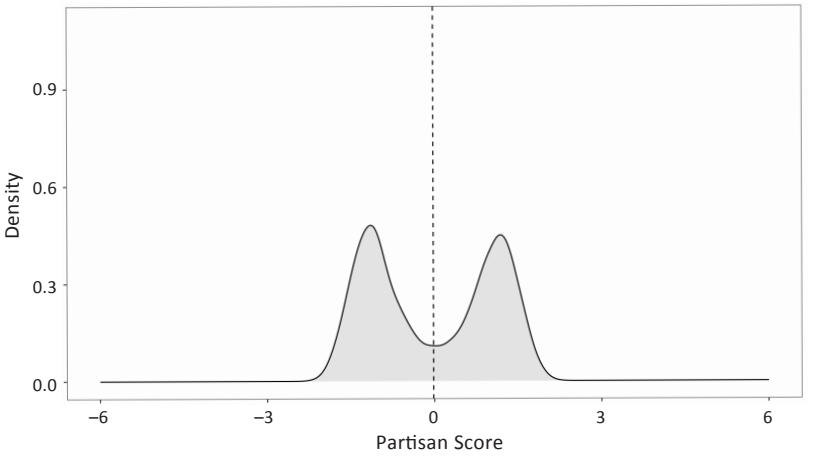
In this case, *Survivor*-style RCV thus yields a different winner than the LPR method, although the ranked-choice ballots are the same. Moreover, the *Survivor*-style method selects as the winner the moderate compromise candidate, whereas LPR selects a more extreme polarizing one. The difference in outcomes is a function of how the two methods order their similar elimination processes. By eliminating the most disliked candidate first, *Survivor*-style RCV knocks out highly polarizing politicians, narrowing the electoral competition to candidates with broader acceptability among all the voters. The LPR method keeps in contention highly polarizing politicians who have relatively strong first-choice support at their end of the ideological spectrum but provoke very strong opposition from the other end. This method is prone to eliminating compromise candidates who have relatively little first-choice support but also do not provoke widespread antipathy. Everyone's second choice but no one's first choice cannot survive an LPR election, whereas this kind of consensus figure would easily win a *Survivor*-style election.

These two electoral methods thus handle hyperpolarization in opposite ways. LPR produces results that replicate extreme polarization within the electorate. We see this quantified in the C-force of Alaska's LPR system, which measures 0.163 in a highly polarized electorate. By contrast, *Survivor*-style RCV counteracts extreme polarization by eliminating especially disliked candidates until a politician remains who commands majority support within the electorate. Because it is a "Condorcet-consistent" electoral method—meaning that it will elect a candidate whom a majority of voters prefer to each other candidate and thus will always elect whichever one is closest to the electorate's median voter—*Survivor*-style RCV has the same C-force as any other "Condorcet-consistent" method.[52]

In the model case of a highly polarized 50–50 electorate, any Condorcet-consistent method will have a C-force of 0.479, nearly three times that of the LPR method. Put differently, while LPR produces winners who on average have a distance from the median voter of 1.683, Condorcet-consistent methods produce winners with an average distance from the median voter of only 1.048, meaning that such methods have a greater capacity to yield less extreme winners even when the electorate is highly polarized. We can see this in visualizations of the winners of the two different systems applied to the same highly polarized electorate, as illustrated by Figures 2.23, shown previously, and 2.24.

Thus, a state with a highly polarized electorate could employ *Survivor*-style RCV in statewide elections, such as those for governor and US senator, to counteract political extremism.

Figure 2.24 Condorcet Winner Distribution, High-Polarization Electorate



Bottom-Two Runoff

Another Condorcet-consistent version of ranked-choice voting will also tend to elect a compromise candidate under conditions of hyperpolarization. As a Condorcet-consistent method, it too would have a C-force of 0.479 in the model case of the highly polarized electorate. Called a bottom-two runoff (BTR), it is similar to the LPR method—except that, instead of eliminating the candidate with the fewest first-choice votes, it conducts a direct head-to-head face-off between the two candidates with the fewest first-choice votes and then eliminates whichever one is preferred by fewer voters overall.[53] Like the LPR method, BTR repeats its version of the elimination procedure until one remaining candidate is preferred by a majority of voters.

BTR is Condorcet-compliant because it will always elect the candidate who would prevail against every other candidate in direct head-to-head matchups, based on the preferences of all voters as indicated on their ranked-choice ballots. This is true even if that candidate has the fewest first-choice votes and thus was paired against the candidate with the next fewest first-choice votes in the initial face-off prescribed by the system. BTR will thus elect whichever candidate is least extreme and polarizing. To use the same illustration as above, Purplish and Ultramarine are the two candidates with the fewest first-choice votes: 32 and 33 percent, respectively, as in Table 2.2.

In a head-to-head matchup, Purplish prevails over Ultramarine 67–33 by picking up all the second-choice votes of those who ranked Scar-

Table 2.2 Ranked-Choice Ballots to Illustrate BTR Method

Percentage of Voters	First Choice	Second Choice	Third Choice
35	Scarlet	Purplish	Ultramarine
33	Ultramarine	Purplish	Scarlet
16	Purplish	Scarlet	Ultramarine
16	Purplish	Ultramarine	Scarlet

let first. Then, with Ultramarine eliminated, Purplish wins with 65 percent of votes to Scarlet's 35 percent by being ranked second by the voters who ranked Ultramarine first.

There is a fear, even among those who find the BTR method theoretically attractive for its propensity to elect compromise centrists, that it could be undermined through strategic manipulation.[54] Using the same example, suppose supporters of Scarlet rank Ultramarine second rather than Purplish, contrary to their true preferences. Then, Ultramarine would defeat Purplish in the first round of the BTR process, and Scarlet would defeat Ultramarine 51 to 49 percent (given the even split among Purplish's supporters in their second-choice preferences). In this way, insincere strategic voting by Scarlet supporters undermines BTR's capacity to elect compromise centrists and simply replicates the polarizing outcome that LPR produced: a narrow 51–49 victory by Scarlet.

The *Survivor*-style method is less susceptible to strategic manipulation. Suppose Scarlet's supporters try the same strategy of ranking Purplish last instead of Ultramarine. This strategy backfires under the *Survivor*-style method: instead of Ultramarine being the first candidate eliminated, as would occur if Scarlet's supporters ranked their ballots sincerely, Scarlet is eliminated. To see this, let's review the ballots cast assuming this insincere strategy (see Table 2.3).

Now, Scarlet has the most last-choice votes with 49 percent. Once Scarlet is eliminated, Ultramarine prevails against Purplish 68 to 32 percent. This result is the worst outcome based on the true preferences of Scarlet's supporters, thus confirming the counterproductive nature of this strategy.

Most-Preferred Voting

BTR has a close cousin that is significantly less susceptible to strategic manipulation of this sort. Like BTR, this variation, which we call

Table 2.3 Ranked-Choice Ballots with Strategic Voting to Illustrate *Survivor*-Style RCV

Percentage of Voters	First Choice	Second Choice	Third Choice
35	Scarlet	*Ultramarine*	*Purplish*
33	Ultramarine	Purplish	Scarlet
16	Purplish	Scarlet	Ultramarine
16	Purplish	Ultramarine	Scarlet

Note: Italics indicate transposed preferences due to strategic voting.

most-preferred voting (MPV), conducts a head-to-head face-off between the two least-preferred candidates and eliminates whichever one is preferred by fewer voters based on all preferences indicated on all ranked-choice ballots. And like BTR, this variation repeats this same elimination procedure until only the winner is left.

The only difference between BTR and MPV is how the methods define the two least-preferred candidates for the purpose of conducting head-to-head elimination matches. Whereas BTR defines them as the two candidates with the fewest first-choice votes, MPV defines them as the two candidates who are ranked higher than other candidates least often. To determine this, we can count the number of times a candidate is ranked higher than another candidate. If there are three candidates—as in our example of Scarlet, Ultramarine, and Purplish—a candidate who is ranked first on a ballot is ranked higher than two other candidates. A candidate who is ranked second is ranked higher than one other candidate, and a candidate who is ranked third (or is unranked) is ranked higher than no other candidate.

To make this calculation simple, we can give each candidate one "preference point" for each other candidate he or she is ranked above. Thus, being ranked first on a ballot secures two preference points, being ranked second secures one, and being ranked third (or unranked) secures zero. We then tally up each candidate's preference points from all the ballots. The two candidates with the fewest total preference points are the two least-preferred candidates.

Then, just like BTR, this variation conducts a head-to-head face-off between the two least-preferred candidates, eliminating the one ranked higher on fewer ballots. The elimination process continues until the winning candidate is preferred by more voters than the other candidate in the final face-off. This variation is also a Condorcet-compliant method because, as in BTR, a candidate who beats all other candidates in head-to-head face-offs necessarily wins this elec-

tion, whether this candidate is involved only in the final face-off or any number of previous ones.

This variation is also normatively attractive insofar as it ensures that the candidate most preferred by the electorate will win. The final face-off in the procedure necessarily includes whichever candidate receives the most total preference points based on all the rankings on all the ballots. This candidate will also win the election unless another candidate is ranked higher by more voters (an unlikely but possible outcome). A candidate who beats the candidate with the most overall preference points head-to-head has a better claim to being the most preferred: between the two, more voters prefer this candidate. Thus, MPV truly elects the most-preferred candidate and for this reason can properly be called most-preferred voting.[55]

For anyone attracted to BTR for its simplicity, MPV emulates that attractiveness as much as possible while being far less susceptible to strategic manipulation. To use the example from before, suppose again that Scarlet's supporters rank Ultramarine second rather than third in the hopes of avoiding the election of Purplish (see Table 2.4).

This insincere strategy works in a BTR system, but it fails in an MPV one. To see this, we first calculate the preference points for each candidate:

Scarlet: 70 + 16 = 86
Ultramarine: 66 + 35 = 101
Purplish: 64 + 33 = 97

Scarlet and Purplish are the two candidates with the least preference points, and Purplish beats Scarlet in the initial head-to-head 65–35. Then, Ultramarine beats Purplish 68–32. Thus, not only does Scarlet fail to win the election, but Ultramarine prevails over Purplish when this insincere strategy is employed—a worse outcome in light of the

Table 2.4 Ranked-Choice Ballots with Strategic Voting to Illustrate MPV Method

Percentage of Voters	First Choice	Second Choice	Third Choice
35	Scarlet	*Ultramarine*	*Purplish*
33	Ultramarine	Purplish	Scarlet
16	Purplish	Scarlet	Ultramarine
16	Purplish	Ultramarine	Scarlet

Note: Italics indicate transposed preferences due to strategic voting.

true preferences of Scarlet's supporters. In this respect, strategic voting backfires under MPV, as it does under *Survivor*-style RCV.

Moreover, it is generally harder for candidates to figure out what might offer a strategic advantage under MPV, as opposed to BTR. The reason for this is that candidates need reliable polling only on first-choice preferences to determine the order of the head-to-head elimination rounds in a BTR system. By contrast, candidates need reliable polling on all the rankings on all the ballots to predict the preference points that will determine the order of the head-to-head elimination rounds under MPV. In a real-world election, especially one involving four or five candidates rather than three, it will be exceedingly difficult to make reliable predictions about each candidate's total number of preference points. Thus, voters may be more inclined to simply rank their ballots honestly to avoid the risk of an insincere strategy backfiring and causing a worse outcome from the perspective of their true preferences.[56]

A "Final Five" Form of Most-Preferred Voting

In considering alternative versions of ranked-choice voting, we have repeatedly invoked the same three-candidate hypothetical election involving two polarizing major-party candidates and a more moderate independent or third-party nominee somewhere in between the two extremes. But unless the electoral system is designed so that the general election is limited to only three candidates that emerge from some sort of primary election process, the ultimate choice that voters face will not always—or even often—be confined to just three candidates. We need to consider the possibility that voters will cast a ballot listing a larger number of candidates, and thus we must analyze how alternative versions of ranked-choice voting would handle a hyperpolarized electorate faced with this wider array of options.

For example, we can imagine voters in a general election choosing between five candidates seeking the same statewide office. Nevada is in the process of adopting this kind of electoral system, having voted for it once and now awaiting another referendum to confirm it.[57] If this measure takes effect, it will employ the LPR method of ranked-choice voting. But it is possible to imagine that Nevada—or another state—could instead implement a "final-five" system with a different version of ranked-choice voting, including MPV. These two forms of the "final-five" system would diverge sharply in their treatment of the same highly polarized electorate.[58]

Imagine a "final-five" election with one candidate from each of the five partisan "lanes"—or "hues" of partisanship—identified at the out-

set: Ultramarine, Blue, Purple, Red, and Scarlet. Suppose in this highly polarized electorate, the percentage of first-choice preferences among voters is as follows:

Ultramarine: 30 percent
Blue: 15 percent
Purple: 10 percent
Red: 16 percent
Scarlet: 29 percent

Suppose further, for sake of simplicity, that all 45 percent of voters who most prefer one of the Democrats (of either hue of blue) have as their second choice the other Democrat and that their preferences are otherwise linear in terms of degrees of partisan distance from the two Democrats. Conversely, the 45 percent of voters who most prefer one of the Republicans (of either shade of red) have as their second choice the other Republican, and they too have remaining preferences that are linear in terms of partisan distance from the two Republicans. Let's suppose that the voters who prefer Purple split slightly in favor of Republicans over Democrats but that they all prefer the more moderate Red and Blue major-party candidates over the more extreme Scarlet and Ultramarine candidates. Table 2.5 lists the ranked-choice ballots that result from those suppositions.

With these ballots, Scarlet wins the election using the LPR method. Purple is eliminated first,[59] then Blue, then Red, and finally Scarlet defeats Ultramarine 51 to 49 percent despite starting out with a smaller share of first-choice votes. In this way, LPR can elevate a more extreme candidate with very little first-choice support in a highly polarized election.[60]

By contrast, with these same ballots, MPV (like any Condorcet-compliant system) will elect Purple as the compromise candidate most representative of the highly polarized electorate's overall preferences—

Table 2.5 Ranked-Choice Ballots in a "Final Five" Election with MPV

Percentage of Voters	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice
30	Ultramarine	Blue	Purple	Red	Scarlet
15	Blue	Ultramarine	Purple	Red	Scarlet
4	Purple	Blue	Red	Ultramarine	Scarlet
6	Purple	Red	Blue	Scarlet	Ultramarine
16	Red	Scarlet	Purple	Blue	Ultramarine
29	Scarlet	Red	Purple	Blue	Ultramarine

taking into account all the preferences indicated on each voter's ranked-choice ballot, from first choices through last choices. MPV does this by first calculating the total number of preference points for each candidate:

Ultramarine: 120 + 45 + 4 = 169
Blue: 60 + 90 + 12 + 12 + 45 = 219
Purple: 40 + 90 + 90 = 220
Red: 64 + 105 + 8 + 45 = 222
Scarlet: 116 + 48 + 6 = 170

Given these totals, the first head-to-head matchup is between Ultramarine and Scarlet, which Scarlet wins 51–49. The second head-to-head is between Scarlet and Blue, which Blue wins 55–45. The third head-to-head is between Blue and Purple, which Purple wins 55–45.

The fourth and final head-to-head in the MPV procedure is between Purple and Red. Purple wins 55–45 and thus wins the election. This example is unusual in that the candidate with the most total preference points (Red) is preferred by fewer voters than another candidate (Purple). But because Purple is the candidate more voters preferred compared to any other in one-on-one matchups, it is the candidate that should prevail according to this method and its underlying philosophy.

Thus, the "final-five" system produces very different outcomes with the same set of ballots depending upon whether it uses the LPR method or a Condorcet-compliant method such as MPV. LPR elects one of the two most polarizing candidates, Scarlet, who loses head-to-head against every other candidate except Ultramarine and does not receive even 30 percent of first-choice votes. By contrast, MPV elects the least polarizing and most consensual candidate, Purple, whom more voters prefer compared to any of the alternatives.

This sharp divergence in outcome between these two methods is hardly an isolated instance. Rather, computer-simulated elections show a clear and pronounced pattern of divergence between the two systems. As we have seen (and summarized in Table 2.6), these computer simulations show a higher divergence in C-force scores between these two methods in a high-polarization electorate than in a low-polarization electorate.

The same type of computer simulations can also be conducted for profiles of the electorates in each of the fifty states. These profiles are constructed using available social science data on the partisan preferences of voters in each state,[61] and the computer simulated elections can be conducted using both methods. When 100,000 simulated elections are conducted for each state using each method, we see the same pattern

Table 2.6 Comparison of C-Force Scores Between LPR and MPV Methods in Simulated Elections

	C-Force, LPR	C-Force, MPV	C-Force Difference
Low polarization	0.517	0.751	0.234
High polarization	0.163	0.479	0.316

of divergence: the difference between C-force scores for LPR and MPV is largest in the most highly polarized states. In other words, the more polarized the state's electorate, the greater the difference in moderating extremism between the two methods of determining winners from the same ranked-choice ballots.

Take Nevada, for example.[62] It is the third-most polarized state, as measured by the average distance of its voters from its median voter (v): 0.293. Nevada is also the state for which the difference in C-force for these two electoral methods is the largest.[63] With LPR, the average distance of winners from the median voter (w) is 0.227, yielding a C-force of 0.225. With MPV, the average distance of winners from the median voter (w) is 0.147, yielding a C-force of 0.498—a difference in C-force of 0.273.[64] We can see this difference in visualizations of Nevada's electorate, LPR (typical IRV) winners, and MPV (Condorcet) winners, as depicted in Figure 2.25.

The same point applies to Arizona, the fourth-most polarized state,[65] where $v = 0.292$. LPR produces a w of 0.224 and a C-force of 0.232, whereas MPV produces a w of 0.148 and a C-force of 0.494. Figure 2.26 contains the visualizations of these results for Arizona.

The same point also applies to highly polarized states that are not evenly divided, such as Nevada or Arizona, but instead lean heavily to the right. Mississippi, for example, is actually the most polarized state, measured by the average distance of all its voters from the state's median voter (v): 0.296. For Mississippi, LPR elects winners with an average distance from the median voter (w) of 0.203, for a C-force of 0.313,[66] whereas MPV elects winners with a much smaller w of 0.129, for a much higher C-force of 0.562. The difference in C-force is 0.250, the fifth-largest C-force gap in the nation between these two methods of ranked-choice voting. With Mississippi's visualizations, in Figure 2.27, we can see both systems producing winners on the right side of the spectrum, but MPV, as a Condorcet-compliant system, on average produces winners far less extreme than LPR (the basic instant-runoff method):

If we plot each state's C-force score for these two electoral methods in relationship to each state's degree of polarization, we see that a state's C-force for LPR drops sharply as the state's level of polarization rises, as shown in Figure 2.28.[67]

By contrast, a state's C-force score for MPV drops much less sharply as a state's polarization increases (Figure 2.29).

Putting these two plots together, we see that the difference in C-force between LPR and MPV rises rapidly as the degree of a state's polarization increases (Figure 2.30).

Figure 2.25 Voters and Election Winners in Nevada

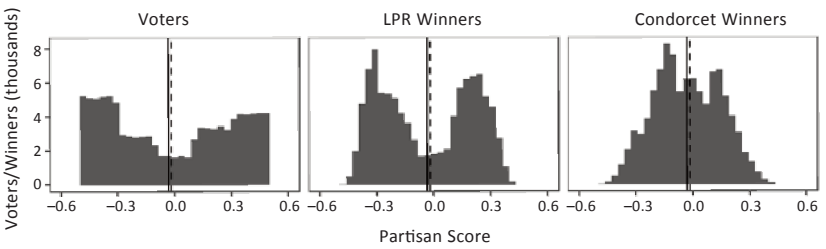


Figure 2.26 Voters and Election Winners in Arizona

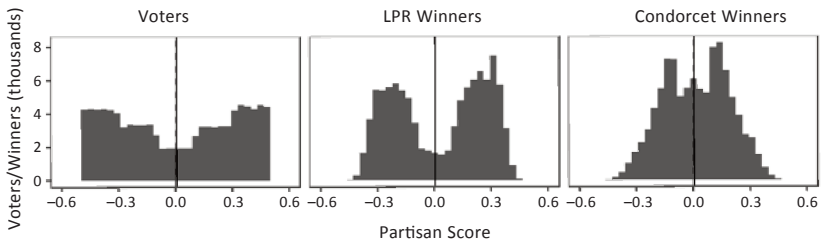


Figure 2.27 Voters and Election Winners in Mississippi

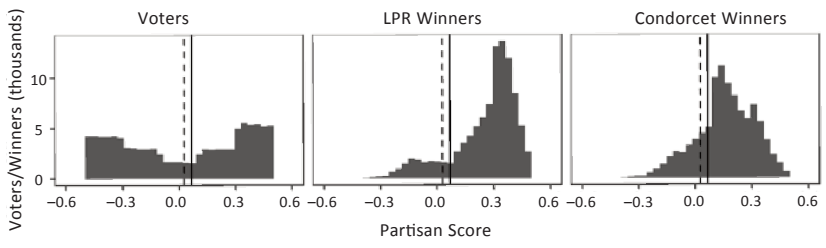


Figure 2.28 Electorate Polarization Versus LPR C-Force

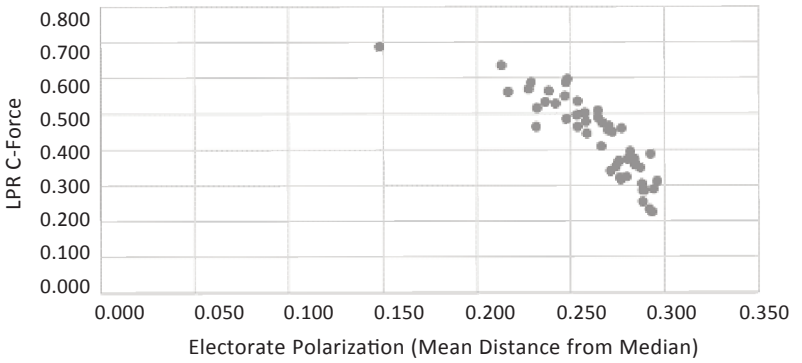


Figure 2.29 Electorate Polarization Versus Condorcet C-Force

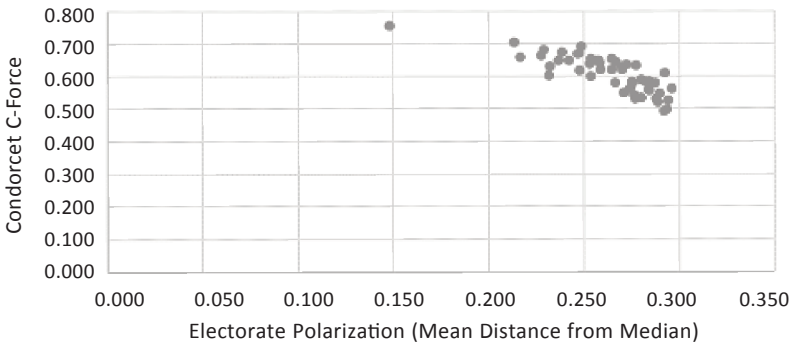
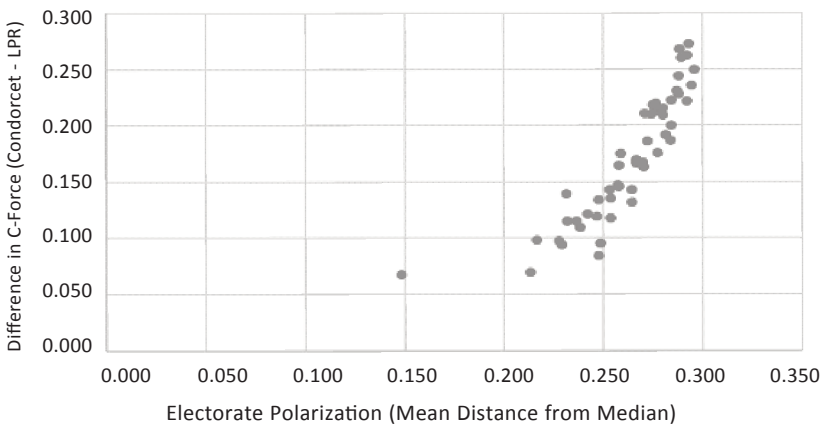


Figure 2.30 C-Force Difference (Condorcet Minus LPR)



This relationship suggests that states with especially high levels of polarization would be particularly well-advised to consider the differences between LPR and MPV if and when they contemplate the adoption of a "final-four" or "final-five" system with ranked-choice voting (as Alaska has done and Nevada is doing). If a goal of this electoral reform is to reduce the frequency with which more extreme candidates win elections in such states, the sharp difference in C-force scores between the two methods of ranked-choice voting is a reason to consider whether adopting MPV rather than LPR would be more effective.[68]

One may wonder whether it is really desirable to elect a candidate for an important statewide office—say, governor or US senator—who, out of five finalist candidates, receives first-choice rankings of only 10 percent of all voters (as in our example above). That seems counterintuitive, given the electoral tradition of the United States. But is it really worse, in terms of representational fairness for all votes, than the outcome produced by the LPR method from the same set of ballots? That method, as we saw, produced a winner who had only 29 percent of first-choice votes—more than 10 percent to be sure, but nowhere near a majority, and not even the largest share, since Ultramarine had 30 percent but was leapfrogged by Scarlet. Between the two alternative methods, it would seem that MPV does a better job overall by taking account of all the preferences of all the voters—including the tribal desires of Democrats that more extreme Republicans do not win, and vice versa—than the LPR method. Yes, it lets a 10 percent first-choice candidate win by building coalitions on both sides, but that is preferable to a method that lets another relatively unpopular candidate prevail through solely one-sided support.[69]

Which candidate, once in office, is better positioned to govern on behalf of the electorate as a whole? Arguably, the moderate will pursue policies more broadly acceptable to the entire electorate, even if those policies are the first choice of relatively few voters. An extreme candidate, by contrast, will likely endeavor to pull policy toward the extreme, tending to alienate a large portion of the electorate and please only a narrow segment that forms their base of support.[70] The United States has certainly experienced the consequences of extremists attempting to dictate legislative outcomes, as exhibited by the collapse of Rep. Kevin McCarthy's speakership in the House of Representatives and the ensuing elevation of a Speaker who comes from the more extreme wing of his party.[71] Thus, for anyone concerned about the capacity of Congress to reach legislative compromises to address the nation's pressing problems, MPV may be a particularly attractive electoral method to employ in more polarized states.[72]

RCV Under Conditions of Asymmetrical Partisan Polarization

Our previous hypothetical examples, in order to illustrate basic principles, have been structured so that partisan polarization is roughly symmetrical: the spectrum that runs from blue to ultramarine is roughly as long as the spectrum that runs from red to scarlet. But as we saw above, the actual partisan polarization that has occurred in the United States over the last several decades has not been symmetrical. Although there has been polarization among both Democrats and Republicans, the shift toward the extreme has been much greater among Republicans than Democrats. One consequence is that many recent elections have exhibited a three-way split between a traditionally moderate Democrat, an extreme MAGA Republican, and a more moderate traditional Republican.

In this situation, deciding what method of ranked-choice voting to use has significant implications. In circumstances where the MAGA Republican is too extreme for the electorate's median voter, using the lowest-plurality runoff system to tabulate ranked-choice ballots will tend to cause the traditional Democrat to win. By contrast, with the same ranked-choice ballots, if the electorate overall is slightly more red than blue, then the use of most-preferred voting will tend to elect the more moderate traditional Republican.

Here is a set of hypothetical ranked-choice ballots that will illustrate this point. Suppose the three candidates are Blue (the traditional Democrat), Scarlet (the extreme MAGA Republican), and Crimson (a more moderate Republican like Senator Mitt Romney). Imagine the ranked-choice ballots involving these three candidates are listed in Table 2.7.

With these ballots, LPR elects Blue: Crimson is eliminated first; then Blue prevails over Scarlet 51–49. This is true even though only 40 percent of first-choice votes were cast for the Democrat, while 60 percent of first-choice votes were cast for either of the two Republicans.

Table 2.7 Ranked-Choice Ballots to Illustrate Difference Between LPR and MPV

Percentage of Voters	First Choice	Second Choice	Third Choice
40	Blue	Crimson	Scarlet
11	Crimson	Blue	Scarlet
14	Crimson	Scarlet	Blue
35	Scarlet	Crimson	Blue

The reason is that Scarlet is extreme enough that a significant fraction (although not a majority) of Crimson's supporters cross party lines to make Blue rather than Scarlet their second choice.

But if MPV—or any Condorcet-consistent procedure—is the method for tabulating these same ranked-choice ballots, then Crimson wins the election, defeating both Blue and Scarlet head-to-head. Thus, one of the two Republican candidates—the more moderate one—wins or loses depending on which tabulation method is used.

Something very similar to this hypothetical happened when Alaska first used its ranked-choice voting procedure in a 2022 special election for the state's single congressional seat. The three candidates were Mary Peltola, a traditionally moderate Democrat; Sarah Palin, an extreme Trump-endorsed MAGA Republican; and Nick Begich, a more traditional Republican. Peltola received 40 percent of first-choice votes, while the two Republicans split the remaining 60 percent, with Palin receiving more than Begich. Thus, under the LPR method, Begich was the first candidate eliminated. Palin got more of the second-choice votes from those who ranked Begich first, but Peltola received just enough of those second-choice votes from Begich's supporters to narrowly beat Palin 51.5 to 48.5 percent.

Democrats saw this result as a triumph of RCV's power to defeat an extremist like Palin. Republicans, however, saw it as a reason to repudiate RCV entirely: their two candidates got 60 percent of first-choice votes, and yet the Democrat won the seat. That result, from their perspective, meant that RCV was inherently flawed.

The problem was not the use of ranked-choice ballots, however. The problem was the particular tabulation method used to identify the winner from those ranked-choice ballots. The more moderate Republican in the race, Begich, was the Condorcet winner: he defeated both Peltola and Palin head-to-head. Yet he was the first to be eliminated with the use of LPR. Republicans were understandably upset about the unfairness of that outcome.

Unfortunately, Republicans have overreacted in their opposition to ranked-choice voting. Instead of condemning the particular tabulation method, they have attacked RCV in general without differentiating among tabulation methods. The Republican National Committee adopted a resolution "call[ing] on Congress, state legislatures, and voters to oppose ranked choice voting in every locality and level of government." Elected Republicans in various states have heeded this call and enacted or introduced legislation aimed at prohibiting the use of RCV.

The point here is not to advance an electoral method that favors one party or the other. Rather, the point is to identify the method that is fairest to all voters, regardless of their party affiliation or degree of partisanship. With respect to single-seat elections, the class of electoral methods that are Condorcet-consistent can be reasonably deemed the fairest because, by electing the candidate whom a majority prefers compared to every other candidate, these methods leave the fewest voters on the losing side of the outcome.

As we have seen, various forms of RCV are Condorcet-consistent, even though LPR is not. Thus, there is no need to object to RCV categorically. But insofar as some states may remain adamantly opposed to RCV, it is still possible to implement a Condorcet-consistent electoral method without using RCV at all.

A "Top-Three" General Election Without RCV

States wishing to reduce the risk of extreme winners in statewide elections without using any form of ranked-choice voting may wish to consider a "top-three" variation on California's "top-two" system. California's system, to recall, uses a nonpartisan primary (of the same type as Alaska's "top-four" system) to determine the two candidates who will proceed to the general election. It would be possible to use the same kind of nonpartisan primary but advance to the general election the three candidates who receive the most votes, rather than just the top two.

In the general election, voters would then express their preference between each pair of the three candidates: A versus B, A versus C, and B versus C. A candidate who receives more votes against each opponent in the general would win the election. For instance, if more voters prefer both B to A and B to C, then B wins. In this case, the procedure elects the Condorcet winner among the three general election finalists.[73]

There is, of course, a chance that one candidate is preferred by more voters over one of his or her general election opponents but not the other. In other words, more voters might prefer A to B, B to C, and C to A. In this case, there needs to be a rule for breaking a three-way tie.

Two straightforward tiebreaker rules are possible. One is simply to count all the votes that each candidate receives across all three sets of pairwise preferences, and the candidate with highest total number of votes wins.[74]

The other simple rule for breaking the tie is to elect the candidate whose single pairwise defeat has the smallest margin. Suppose A beats

B, 55–45; B beats C, 53–47; and C beats A, 51–49. In this case, A's margin of defeat against C, 2 points, is the smallest of the three margins of defeat, making A the winner according to this tiebreaker rule, which in the electoral science literature is (rather unhelpfully) called "minimax."[75] One normatively attractive quality of this tiebreaker rule is that it identifies the candidate closest to being the Condorcet winner when there isn't one: because it elects the candidate with the narrowest margin of defeat, it chooses the winner who comes closest to being preferred by a majority of voters over each other opponent. This attribute of the rule causes it to elect whichever of the three candidates is least divisive—or, to put the point more positively, is most unifying.

It is easy to see how this "top-three" system would counteract extremism. If two of the three finalists are relatively extreme but the third is not, the third is most likely to be preferred by more voters in head-to-head matchups against the other two and thus win the election. This is true whether the two more extreme candidates are on opposite sides of the third candidate or on one side of the partisan divide with the third closer to the electorate's median voter (either on the same or the opposite side of the partisan divide). In other words, in an electorate where the median voter is exactly Purple—equidistant from Blue and Red—the candidate closest to Purple, whether more Violet or more Fuchsia, will win, regardless of whether the other candidates are two more extreme shades of Blue, two more extreme shades of Red, or one extreme shade of Blue and one extreme shade of Red.

If this kind of "top three" system were adopted in states or districts where extreme candidates are currently able to win under the conventional electoral system of partisan primaries and plurality-winner general elections, moderate candidates would be more likely to prevail. Consider the cases of North Carolina and Ohio. In both states, an extreme election denier endorsed by Trump won the 2022 US Senate election: former Representative Ted Budd in North Carolina, who had promoted Trump's election denialism in the House, and J. D. Vance in Ohio, who embraced election denialism and other extreme positions in order to obtain Trump's endorsement in the state's Republican primary. Both candidates defeated their Democratic opponents in the conventional plurality-winner general election, and both would have prevailed even if their states had used California's "top-two" system or Alaska's "top-four" system with its lowest-plurality runoff procedure. But if these states had used the kind of "top-three" system described here, less extreme Republicans would have had a better chance of winning instead.[76]

In North Carolina, the extremist Budd defeated former governor Pat McCrory, a much more moderate Republican, in the primary. But if the state had used this "top-three" system with its nonpartisan primary, McCrory would have advanced to the general election along with Budd and the Democrat. In the general, McCrory almost certainly would have won: voters who preferred the Democrat to Budd (47 percent of the electorate) would have preferred McCrory to Budd, and voters who preferred Budd to the Democrat would also have preferred McCrory to the Democrat. Thus, McCrory would have been preferred by more voters when paired against both opponents and therefore prevailed in the "top-three" system.

Similarly, if Ohio had used the "top-three" system in 2022, the broadly popular incumbent, Rob Portman, would have been able to run for reelection without having to compete in a Republican primary dominated by Trump and his extremist MAGA supporters. In a "top-three" nonpartisan primary, Portman easily would have secured a spot on the general election ballot, along with Vance and the Democrat. Compared directly against Vance, Portman almost certainly would have been preferred by more voters, as the Democrat's supporters (also 47 percent of the electorate) would prefer the more moderate Portman to extremist Vance. Portman also would have been preferred by more voters compared to the Democrat, since Vance's supporters would prefer Portman to the Democrat. Thus, the "top-three" system would have allowed more moderate Republicans to win the 2022 US Senate elections in Ohio and North Carolina.[77]

The same point applies to House of Representative seats. Consider Arizona's second congressional district. In 2022, another Trump-endorsed election denier, Eli Crane, won the GOP primary against a more moderate Republican and then went on to win the general election against the Democrat. Crane would become one of the most extreme members of the House GOP caucus, where he was one of eight Republicans led by Matt Gaetz to topple Kevin McCarthy's speakership. But if Arizona had used the "top-three" system, the more moderate Republican most likely would have won the general election against both Crane and the Democrat.[78]

Used nationwide for congressional elections, the "top-three" system would tend to send fewer extremists to Congress. Overall, this would lead to a greater capacity to compromise, pass legislation, and govern in the national interest. It would also significantly reduce the likelihood of extremists in Congress, especially in the House of Representatives, engaging in the kind of antidemocracy behavior that former

representative Liz Cheney has warned could occur if a leading election denier retains the speakership after the 2024 elections.[79]

This "top-three" system obviously comes with the cost of making voters in the general election vote three times to elect the winner of a single office. But this cost should be weighed against the benefit of effectively counteracting extremism, particularly if one seeks an alternative to ranked-choice voting. Both methods involve trade-offs. Ranked-choice voting makes it much easier for voters to select among more than three candidates. In an election with four candidates, a Condorcet-consistent election without ranked-choice ballots would require six direct pairwise comparisons, a prohibitive burden to impose on voters. But insofar as a choice among the top three candidates in a nonpartisan primary is sufficient to avoid the election of extremists—as indicated by the North Carolina, Ohio, and Arizona examples—having voters make three direct pairwise comparisons is not significantly more burdensome than having voters rank three candidates in order of preference.

Apart from the task of casting the ballot, the "top-three" system is easier for voters to understand than ranked-choice voting. It is also easier for election administrators to compute and for voters to follow on election night. As votes are counted, the running tally of A versus B, A versus C, and B versus C is reported. It is therefore easy to see immediately if one candidate is ahead of both opponents (or if a tiebreaker will be necessary). The "top-three" system requires no complicated calculation process involving the transfer of ballots from one candidate to another after candidates are eliminated, as required by a ranked-choice voting procedure.

This is not to say the "top-three" system is superior to ranked-choice voting. Some states might prefer the former, while others might prefer a version of the latter. Both are capable of counteracting extremism when coupled with the kind of nonpartisan primary used in California and Alaska—especially if the form of ranked-choice voting used elects Condorcet winners, as does the direct "top-three" system. Given their roles as laboratories of democracy, states can experiment with these different systems for avoiding the election of extremist candidates and learn through experience the detailed pros and cons of each alternative.

The Role of Parties in a Nonpartisan Primary System

Whether a state adopts a "top-four" or "top-five" nonpartisan primary as in Alaska or potentially Nevada, or instead the kind of "top-three" non-

partisan primary just discussed, there remains the question of how political parties interact with the chosen system. The nonpartisan primary can permit candidates to list the political party with which they are affiliated (as they do in California and Alaska). The nonpartisan primary could also permit candidates to indicate if they have been endorsed or nominated by their party in a preprimary party procedure, such as a caucus or a convention. A state could even permit a form of "fusion voting" in which a candidate's name could appear on the ballot—in either the primary, the general election, or both—as endorsed or nominated by more than one party.

Thus, the decision to use a nonpartisan primary does not by itself dictate the specific relationship between political parties and the electoral system. The nonpartisan primary functions essentially as the first round of a two-round electoral system operated by the government, similar to the two-round system that France uses for its presidential and national legislative elections. Political parties operate robustly in France, where voters know which candidates are endorsed or nominated by which parties for both rounds of the two-round system. The same could be true of a well-structured two-round system in the United States.

There remains the question of how many candidates should appear on the nonpartisan primary ballot and what method or rule should be used to determine their qualification. Forty-eight candidates participated in Alaska's first "top-four" primary, a special election to fill the state's single congressional seat, and thirty or more candidates often run in California's "top-two" primaries.[80] That is far too many candidates for voters to reasonably evaluate.

States could modernize the procedures by which candidates qualify for nonpartisan primary ballots, adopting an online system for electronic signature gathering to replace the old-fashioned pen-and-paper method currently employed. No aspect of today's electoral process is more antiquated than signature gathering for ballot access. A candidate's supporters, using their smartphones or tablets, could still go door-to-door to collect electronic signatures from registered voters. But registered voters could also go online themselves to sign any candidate's petition. Because signatures are not secret ballots, gathering them online does not raise the same internet security concerns as online voting.

States could set a reasonable threshold for the number of online signatures needed to qualify for the nonpartisan primary ballot. In a "top-four" or "top-five" system, a state might wish to have no more than a dozen or so candidates on the primary ballot, from which voters would winnow the field to four or five for the general election. For a

"top-three" system, a state might wish to have no more than ten candidates in the primary.

A state could aim for these targets by setting the required number of signatures accordingly and adjusting them if necessary. For example, if a requirement of signatures from 1 percent of registered voters produced too many candidates, the state could raise the threshold to 2 percent or even higher for future elections. The Supreme Court upheld a 5 percent requirement before the invention of the internet,[81] and given the convenience of an online signature-gathering system—which would allow any candidate to post his or her petition—any threshold reasonably tailored to the state's target number of candidates would pass constitutional muster.

What voting procedure should be used in the nonpartisan primary itself to determine which candidates advance to the general election? In a "top-four" or "top-five" system that uses a form of ranked-choice voting in the general election, it would also be possible to use RCV in the nonpartisan primary to narrow the field to the specified number of finalists. Both lowest-plurality runoff and most-preferred voting could be adapted for this kind of nonpartisan primary. Doing so would tend to reduce the risk of extremists making it onto the general election ballot, especially if MPV were the particular method of RCV employed for this purpose.

But in a state that decided to adopt the direct "top-three" system described above in order to avoid using RCV in the general election, it seems unlikely that any form of RCV would be the preferred method for the nonpartisan primary.[82] If this is the case, the simplest procedure for the state to employ in the primary would be traditional plurality voting: voters select the one candidate they most prefer, and the candidates with the most votes advance to the general election. This is the procedure that both California and Alaska currently use for their nonpartisan primaries—California to identify two candidates for the general election and Alaska to identify four.

The "top-three" system could use exactly the same procedure to identify three finalists for the general election. Although there is some risk in an especially polarized primary electorate that the top three candidates will all be extreme partisans from either or both sides of the partisan divide, the examples from the 2022 election described above indicate that this risk is fairly low. Much more likely is that one of the three finalists will be relatively moderate, and this more moderate candidate will prevail against two more extreme opponents. Or, if two candidates are fairly moderate and only one extreme, as was often true of the top

three candidates in the 2022 midterms, then at least one of the more moderate candidates would win and the sole extremist among the three finalists would not be elected.

Thus, a nonpartisan primary, whether part of a "top-four" or "top-five" system with RCV or a "top-three" system without RCV, can help protect against the election of extremists. But for states that insist on retaining partisan primaries, there is another possibility to discuss.

Party-Based RCV System

Rather than qualifying candidates for the general election ballot, an electoral system could qualify political parties. In a "top-five" system, that is, the top five qualifying parties could appear on the general election ballot, with the names of candidates listed only because they are party nominees. The parties could make their nominations through a primary or convention (or perhaps some other means). The nominated candidates would then be on the ballot by virtue of their parties having earned a spot that they are entitled to fill.

Maine operates something like this party-based RCV system.[83] Parties can qualify for the general election ballot, but so too can independent candidates. There is no specific limit on the number of parties or candidates that can qualify for the general election ballot. Rather, parties or candidates can qualify through separate threshold requirements. Whatever the number of candidates on the ballot, the lowest-plurality runoff form of RCV is used to elect the winner.

Maine's experience with this relatively new system is limited and thus gives us only a rudimentary sense of its capacity to promote moderation. The dominance of the two major political parties in Maine, as elsewhere in the United States, suggests that this version of RCV has only a modest capacity to counteract creeping polarization and extremism. As indicated above, a new centrist third party would not be competitive in Maine's system—with its use of LPR—unless the party's share of first-choice votes threatened to become large enough to move it into second place ahead of one of the two main parties.[84]

Nonetheless, using LPR rather than simple plurality voting within Maine's party-based system may cause the two major parties to stay closer to the center than they otherwise would.[85] Doing so would tend to keep the creation of a centrist third party in check. Moreover, LPR would reduce the pressure on major parties and their candidates to cater to the political extremes on either side, because as long as first-choice support

for extremist parties stayed below that for Democrats and Republicans, then the process would eliminate the extremist party nominees and make the final choice between the Democrat and the Republican.

If polarization in a Maine-style system gets to the point where the two dominant parties are at the extreme ends of the political spectrum—say the twenty-yard lines or even closer to the end zones—and one or more third parties occupy the center but cannot attract enough support even through the LPR process to leapfrog either of the two extremist parties, it may be necessary to consider MPV (or some other Condorcet-compliant form of RCV) as a way to prevent elections from boiling down to a choice between these two extremist parties. MPV would be a suitable substitute for LPR in a Maine-style system, and regardless of how candidates qualify for the general election ballot, it could be used to determine the winner from the ranked-choice ballots.

For those who believe it is important to organize electoral competition around political parties rather than candidates, modifying Maine's version of RCV to employ MPV rather than LPR would open up the system to more centrist parties. To win over the median voter under the MPV procedure, parties and their nominees could not stray too far from the center of the electorate. If the Democrats and Republicans opened up a hole in the middle, another party would be able to fill it. If the Democrats and Republicans moved back toward the center in order to avoid the emergence of a competitive third party, the effect would still be to return electoral competition to between the forty-yard lines.

Fusion Voting Within an RCV System

It is also possible to incorporate fusion voting within a party-based ranked-choice voting system such as Maine's. Fusion voting permits a candidate on the general election ballot to be the nominee of more than one political party. All the votes cast for the candidate count toward his or her vote total regardless of which party nomination the voter chooses to support when casting the ballot. The same principle could apply when tallying preferences for a candidate on a ranked ballot—although it would be necessary to have a clear ballot design that prevents voters from attempting to give the same candidate two different rankings.

Some have advocated fusion voting in a simple plurality-winner electoral system, without ranked ballots, as a way to counteract polarization.[86] The theory is that in a fusion voting system a new middle-of-the-road party—let's call it the Moderate Party—could act as a kind of broker, co-

nominating whichever major-party nominee stayed closer to the center of the electorate. The hope would be that some voters, who would not vote for a candidate labeled as a Democrat or a Republican, would be willing to vote for the same candidate if co-labeled as a Moderate.

While the idea is attractive in principle, there is little evidence that it would have a significant effect in practice. New York and Connecticut have used fusion voting for decades, but no Moderate Party has formed there to play this kind of brokering role. Instead, fusion voting has permitted more extreme parties—to the left of Democrats and to the right of Republicans—to play a leveraging role that risks pulling the major parties away from the center of the electorate rather than toward the middle.

In an RCV system, however, a different form of fusion might exert a more powerful centripetal effect. If a Moderate Party formed a fusion alliance with either the Democrats or the Republicans, they might be able to convince their respective voters to rank each other's preferred candidate second while still ranking their favored candidate first. In an RCV system with lowest-plurality runoff, if the Moderate Party's most-preferred candidate were to be eliminated first, the alliance might cause all the ballots ranking that candidate first to be transferred to the other party in the alliance. The attractiveness of this alliance might tend to pull the two major parties closer to the center than fusion voting would in a simple plurality-winner system.

A fusion alliance in an electoral system with most-preferred voting would likely have an even greater centripetal effect. If the Moderate Party and the Democrats, for example, convinced their supporters to rank each other's nominees first and second, it would be difficult for parties on the right side of the spectrum to prevail in a Condorcet-compliant system like MPV. Of course, the same holds true in the opposite direction: if the Moderate Party entered a fusion alliance with Republicans, it would be hard for Democrats to win. Thus, a new centrist party would be an especially effective powerbroker in the context of a Condorcet-compliant system that facilitated this kind of fusion alliance.

A form of fusion voting could also be incorporated into an electoral system like California's "top-two" system. Parties could nominate candidates prior to the first round of this two-round system. Then, if a party's nominee did not advance to the final round, that party could enter a fusion alliance with whichever advancing party's nominee it preferred. Thus, if the Moderate Party's candidate did not make it to the final round, the party could co-endorse whichever "top-two" finalist it considered most moderate. This kind of fusion in a "top-two" system

would also have the greatest effect in offsetting polarization if the procedure for determining which "top-two" candidates advance to the final round is not a simple plurality vote but rather some form of RCV. If MPV is used in the first round of this system, the candidate with the most preference points will be one of the "top-two" finalists, a sign of being broadly acceptable to the entire electorate, and the other candidate will either have the second-most preference points or will have advanced through the elimination process by being preferred each time by more voters than the other candidate in contention.

Conclusion

Political polarization may reach a point where no electoral system can save a society from tearing itself apart. The United States arguably reached that point in the 1850s, in the lead-up to the Civil War, and some citizens—and even political scientists—fear that partisan animosity is once again reaching an unsustainable level.

The exploration of alternative electoral systems in this chapter is premised on the proposition that, as long as polarization has not yet reached a breaking point, our systems for aggregating electoral preferences and determining the winners of elections can be reformed to counteract, at least to some degree, the centrifugal forces pushing the two sides ever further apart.

There is no single electoral system that all states should adopt to counteract the rise of political extremism. Instead, there is a family of alternative electoral systems, each of which has the capacity to counteract polarization and extremism to varying degrees, and each of which involves its own particular set of policy trade-offs.[87] Some of these alternatives may be easier for the public to understand and accept than others—a factor that must be a key consideration apart from whatever theoretical benefits a system may have.

The "top-three" system offers considerable advantages, including its straightforward accessibility to voters and its simplicity to administer and report. Voters need not bother with the complexities associated with various forms of ranked-choice voting. Among the forms of RCV that counteract the effect of polarization, the *Survivor*-style Coombs method is probably the most accessible to the average citizen because of its similarity to the TV show's elimination method. The most-preferred voting method is arguably superior in terms of its ability to elect the candidate who performs the best against the competition, but insofar as

it is less familiar and harder to comprehend, it may on balance be less attractive than the *Survivor*-style method.[88]

Different states suffer from different degrees of polarization. Each state has its own unique electoral profile, although some share similarities.[89] Thus, different states reasonably may wish to make different choices regarding what particular electoral reforms best suit their needs. Simply put, some states may need stronger antiextremism "medicine" than others. For example, the typical lowest-plurality runoff version of RCV may be enough to cure some states of their current bout of polarization. But in other, more polarized states—or if polarization gets worse in the future—a stronger dose of MPV (or some other Condorcet-compliant form of RCV) may be needed to counteract extremism.

Each state's choice will be partially a question of facts: Just how polarized is the electorate? But it also will be partially a question of values: Just how important is it to keep electoral competition within the traditional forty-yard lines? The combination of these considerations for each state necessarily means there is no "one-size-fits-all" solution.

States should be encouraged to experiment with alternatives, including those considered here. Even if there is no single perfect system for all states, it is fair to say that most would benefit from moving away—at least to some extent—from the prevailing system of partisan primaries followed by plurality-winner general elections. It is this system, combined with increased polarization in the electorate, that causes overrepresentation of extremism in Congress and state legislatures. Politics is no longer played within the forty-yard lines. Getting the competition back toward the middle of the field in most states will require some sort of structural reform of the electoral process along the lines we have considered here.

Notes

1. This chapter resulted from the deliberations of the task force's working group on ballot structures, which included Eric Maskin, Charles Stewart, Lisa Manheim, and Michael Kang. Although the chapter benefits greatly from those contributions, readers should not assume that the working group members agree with all of the content.

2. Georgia has a variation of a two-round system, which includes the possibility of a runoff between the top two vote getters in the general election if no candidate in the general election receives a majority of votes. Georgia's general election follows traditional partisan primaries and in this respect is more like most states than the "top two" system used in California and Washington. Although Georgia governor Brian Kemp and secretary of state Brad Raffensberger were able to defeat primary challenges encouraged by former president Donald Trump because of their role in resisting his efforts to overturn the 2020 presidential election in that state, the structure of Georgia's system as a general matter is unlikely

to more effectively counteract extremism than the "top two" system used in California and Washington. When extremist candidates win a partisan primary in Georgia's system, they can then win the general election—with or without a runoff—as long as they are more popular than the alternative, typically the nominee of the opposing major party.

France also uses a similar two-round system for its presidential and legislative elections, and in some key ways France's system resembles the one in California and Washington. The first round in France, as in those states, is nonpartisan in the sense that all candidates from all parties compete against each other, with the top two vote getters advancing to the second round. In France, however, there is only a single candidate from each party in the first round: a candidate who has received the party's nomination from an internal party procedure. Moreover, France holds the two rounds only two weeks apart, whereas in California and Washington the two rounds are separated by many months. Insofar as other states find a nonpartisan "top two" primary attractive, they should consider adopting some of the French system's specific features, which help increase turnout in the first round.

3. Richard H. Pildes, "Political Reforms to Combat Extremism," in *Our Nation at Risk: Election Integrity as a National Security Issue*, ed. Karen J. Greenberg and Julian E. Zelizer (New York: NYU Press, 2014), 70–92.

4. John Rawls, *Political Liberalism* (New York: Columbia University Press, 2025).

5. For an exploration of the value of alignment in the design and implementation of electoral systems, see Nicholas O. Stephanopoulos, *Aligning Election Law* (New York: Oxford University Press, 2024).

6. Nolan McCarty, *Polarization: What Everyone Needs to Know* (New York: Oxford University Press, 2019); Rachel Kleinfeld, *Polarization, Democracy, and Political Violence in the United States: What the Research Says* (Washington, DC: Carnegie Endowment for International Peace, 2023).

7. Joseph Bafumi and Michael C. Herron, "Leapfrog Representation and Extremism: A Study of American Voters and Their Members in Congress," *American Political Science Review* 104, no. 3 (2010): 519. https://doi.org/10.1017/S0003055410000316; Nathan Atkinson, Edward B. Foley, and Scott Ganz, "Beyond the Spoiler Effect: Can Ranked Choice Voting Solve the Problem of Political Polarization?," Georgetown McDonough School of Business Research Paper No. 4411173, *Illinois Law Review* (October 2024). http://dx.doi.org/10.2139/ssrn.4411173. An important new paper by Atkinson and Ganz demonstrates the degree to which this problem has become exacerbated in recent years. Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024). http://dx.doi.org/10.2139/ssrn.4728225.

8. Cook Political Report with Amy Walter, Cook Partisan Voting Index.

9. The fact that Democrats cluster in cities while Republicans are dispersed throughout rural areas causes a district's median voter to diverge sharply from the statewide median voter even without any artificial manipulation of district lines due to partisan gerrymandering. When manipulative gerrymandering is added to the underlying divergence caused by legitimate geography, the degree of difference between a district's median and the state's can become even larger—and considerably so. See Stef W. Knight, "First Look: Battleground Imbalance," *Axios* (July 25, 2021) (describing study showing this difference in each state).

10. Appendixes to this chapter are available at https://kb.osu.edu/handle/1811/105337.

11. For an excellent explanation of why this is true, see Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

12. Robert A. Dahl, *A Preface to Democratic Theory* (Chicago: University of Chicago Press, 2006), 98.

13. Robert A. Dahl, *A Preface to Democratic Theory* (Chicago: University of Chicago Press, 2006), 97–98.

14. Anthony Downs, *An Economic Theory of Democracy* (New York: Harper & Bros., 1957), 120.

15. Anthony Downs, *An Economic Theory of Democracy* (New York: Harper & Bros., 1957), 120.

16. Benjamin Reilly, "Centripetalism and Electoral Moderation in Established Democracies," *Nationalism and Ethnic Politics* 24, no. 2 (2018): 201.

17. Scott Ganz deserves credit for suggesting this metric.

18. Rachel Kleinfeld, *Polarization, Democracy, and Political Violence in the United States: What the Research Says* (Washington, DC: Carnegie Endowment for International Peace, 2023), 16, 21, 26.

19. John Sides, Chris Tausanovitch, and Lynn Vavrek, *The Bitter End: The 2020 Presidential Campaign and the Challenge to American Democracy* (Princeton, NJ: Princeton University Press, 2022).

20. Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

21. A few states use multimember districts for their state legislatures, although they do not use proportional representation for these multimember districts. "State Legislative Chambers That Use Multi-member Districts," Ballotpedia.

22. Bill Bishop and Robert Cushing, *The Big Sort: Why the Clustering of Like-minded America Is Tearing Us Apart* (New York: Houghton Mifflin, 2008).

23. Dan Balz and Clara Ence Morse, "American Democracy Is Cracking. These Forces Help Explain Why," *Washington Post*, August 18, 2023.

24. As already suggested, the problem of "natural" gerrymandering also occurs on a statewide level relative to the nation as a whole. Even though the United States is relatively purple, many states are deep blue or deep red, and their statewide elections accordingly are uncompetitive. This is more the case for US Senate elections than for gubernatorial elections. Voters in a blue state like Massachusetts will occasionally vote for a Republican governor as a kind of check against Democrats becoming too extreme. But in US Senate elections, where partisan control of the entire chamber depends upon elections in all the states, voters are less likely to cross party lines in a way that would hurt their preferred party's overall share of Senate seats. To the extent that uncompetitive elections increase the power of political extremism, that extra factor compounds the problem analyzed in this chapter. For further analysis on this point, see the online appendix to this chapter, available at https://kb.osu.edu/handle/1811/105337.

25. These profiles come from Nathan Atkinson, Edward B. Foley, and Scott Ganz, "Beyond the Spoiler Effect: Can Ranked Choice Voting Solve the Problem of Political Polarization?," Georgetown McDonough School of Business Research Paper No. 4411173, *Illinois Law Review* (October 2024). (The profiles for all fifty states are in the online appendix to this chapter, available at https://kb.osu.edu/handle/1811/105337.)

26. Politics, of course, is not confined to the single dimension of traditional left-right competition. Still, as the eminent political scientist John Aldrich explained in his book *Why Parties?: A Second Look*, it is necessary to organize political competition along a single dimension, at least in the legislature if not in the electorate as a whole, so that some group can form that is able to secure a majority of votes. John H. Aldrich, *Why Parties?: A Second Look* (Chicago: University of Chicago Press, 2011). Moreover, as reductionist as it can sometimes seem, characterizing current American political competition as a battle between blue and red teams, with some purple voters in middle (and members of the blue and red teams varying in the degree of intensity to their blueness or redness), is a largely accurate depiction. See Anthony Fowler et al., "Moderates," *American Political Science Review* 117, no. 2 (2023) (most voters are identifiable on traditional left-right ideological spectrum). See also Nolan McCarty, *Polarization: What Everyone Needs to Know* (New York: Oxford University Press, 2019), 66 (discussing the increasing one-dimensionality of electoral competition).

27. See Jeremy Gelman, Evan Pristos, and Benjamin Reilly, "The Consequences of a Top-5/RCV System in Nevada: Advantaging Moderates but Sidelining Third Parties?," SSRN, April 27, 2024. https://dx.doi.org/10.2139/ssrn.4808131.

28. Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

29. Different turnout percentages on each side, reflecting different degrees of enthusiasm, can also be a factor in electoral shifts back and forth between the two parties. John Sides, Chris Tausanovitch, and Lynn Vavrek, *The Bitter End: The 2020 Presidential Campaign and the Challenge to American Democracy* (Princeton, NJ: Princeton University Press, 2022), 6 (when there is partisan parity in a "calcified" electorate—whose partisan positions are rigid—small shifts in turnout percentages between the two sides can shift the election one way or the other).

30. Nathan Atkinson, Scott Ganz, and John Mantus, "A Simple Agent-Based Model for Simulating Single Winner Elections," SSRN, July 31, 2024.

31. Most self-identified "independent" voters, who do not officially affiliate with a political party as part of their voter registration, nonetheless act like partisan-leaning voters. "Political Independents: Who They Are, What They Think," Pew Research Center, March 14, 2019.

32. See Lee Drutman, "American politics has reached peak polarization," Vox, May 24, 2016, https://www.vox.com/polyarchy/2016/3/24/11298808/american-politics-peak-polarization.

33. For a dramatic visualization of this increased polarization over time, see "Political Polarization in the American Public," Pew Research Center, June 12, 2014, https://www.pewresearch.org/politics/2014/06/12/political-polarization-in-the-american-public/.

One can question the specific methodology underlying this visualization, but there is little doubt that a significant degree of increased "affective" polarization, or partisan "tribalism," has occurred in recent decades. Kleinfeld, *Polarization, Democracy*, 3.

34. See, e.g., Matt Bai, "Americans Always Need an Existential Threat. This Time, It's Each Other," *Washington Post*, July 17, 2024.

35. Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024) (demonstrating this point with statistics).

36. See Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown

McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

37. In 2022, Andrew Yang and Christine Todd Whitman endeavored to form a moderate "Forward" party. Tim Reid, "Former Republicans and Democrats Form New Third U.S. Political Party," Reuters, July 27, 2022.

38. Whatever one thinks about the wisdom (or lack thereof) of the effort by the centrist No Labels group to qualify for the ballot with the view of potentially running a third-party presidential candidate, the fact that this effort occurred (before it failed to attract any viable candidate) is indicative of the belief that there is a gap in the center needing to be filled. Likewise, the fact that prominent politicians such as Mitt Romney, Joe Manchin, and Liz Cheney have talked openly about the idea of forming a third centrist party indicates the increasing appetite for this. Erin Doherty, "Romney's Third-Party Dance with Manchin Spills into View," Axios. September 13, 2023. In fact, Gallup polling shows the public's desire for a third major party is the highest it has ever been. Jeffery M. Jones, "Support for Third U.S. Political Party Up to 63%," Gallup, October 4, 2023.

39. On the actual prevalence of moderates within the American electorate despite increasing polarization, see Anthony Fowler et al., "Moderates," *American Political Science Review* 117, no. 2 (2023).

40. See Edward B. Foley and Eric Maskin, "How to Depolarize American Politics," *Project Syndicate*, February 8, 2024; Edward B. Foley, "A 'Top Three' Version of California's 'Top Two' Elections," *Common Ground Democracy*, February 11, 2024.

41. Arizona's 2024 US Senate election is arguably an example of this situation. Incumbent Kyrsten Sinema abandoned her reelection campaign as an independent centrist because she had no chance of winning in the existing first-past-the-post system, although she likely could have beaten either the Democrat or the Republican one-on-one.

42. Nathan Atkinson, Scott Ganz, and John Mantus, "A Simple Agent-Based Model for Simulating Single Winner Elections," SSRN, July 31, 2024.

43. Edward B. Foley, "The Nomination and Election of Statewide Candidates," *Illinois Law Review* (October 2024).

44. "2022 French Presidential Election: Official Results," *France 24*.

45. Benjamin Reilly, "Centripetalism and Electoral Moderation in Established Democracies," *Nationalism and Ethnic Politics* 24, no. 2 (2018): 201–221; Jeremy Gelman, Evan Pristos, and Benjamin Reilly, "The Consequences of a Top-5/RCV System in Nevada: Advantaging Moderates but Sidelining Third Parties?," SSRN, last revised April 27, 2024.

46. Glenn Wright, Benjamin Reilly, and David Lublin, "Assessing the Impact of Alaska's Top 4-RCV Electoral Reform" (paper presented at the American Political Science Association Annual Meeting, Los Angeles, California, September 2, 2023). It is important to note, however, that Giessel was a Condorcet winner who came very close to being eliminated by the lowest plurality runoff method. All three candidates received one-third of first-choice votes:

> Cathy Giessel, the moderate Republican: 33.84 percent
> Roger Holland, the more conservative Republican: 33.12 percent
> Roselynn Casey, the Democrat: 33.04 percent

"RCV Detailed Report," Alaska Division of Elections. If Giessel had received just 135 fewer votes, she would have been the first candidate eliminated in Alaska's runoff, even though she still would have beaten both opponents head-to-head.

47. "RCV Detailed Report," Alaska Division of Elections.

48. Applying the Alaska system to a highly polarized 50–50 state is not the same thing as applying the system to Alaska itself. Murkowski was able to prevail over her Trump-endorsed MAGA opponent because Alaska is a red-leaning state where the Democratic Party is relatively weak, and thus Murkowski would be stronger than any Democrat even if she trailed the Trump-endorsed candidate. The same point does not apply to 50–50 states, such as Arizona, Wisconsin, or Pennsylvania, where the Democratic Party is much stronger than it is in Alaska.

A comparison of C-force scores for Alaska's system in Alaska itself versus Alaska's system in Arizona, for example, confirms this truth. Based on 100,000 simulated elections applied to a profile of the state's electorate, in Alaska itself the state's new system has a C-force of 0.4185. By contrast, in Arizona the same system has a much lower C-force of 0.0168.

49. Bernard Grofman and Scott L. Feld, "If You Like the Alternative Vote (a.k.a. the Instant Runoff), Then You Ought to Know About the Coombs Rule," *Electoral Studies* 23 (2004): 641.

50. Michael S. Kang, "Voting as Veto," *Michigan Law Review* 108 (2009): 1221.

51. The Coombs method will always elect the moderate compromise candidate as long as voters whose first choice is one of the two polarizing major-party nominees also make the opposing major-party nominee their last choice.

52. The Marquis de Condorcet was an eighteenth-century French theorist who proposed the idea that a candidate whom a majority prefers to each other candidate should win the election. Iain McLean and Fiona Hewitt, *Condorcet: Foundations of Social Choice and Political Theory* (Brookfield, VT: Edward Elgar, 1994). Unlike the other electoral methods considered below, including most-preferred voting, the specific procedure of the *Survivor*-style (Coombs) method is guaranteed to be Condorcet consistent only when voters are ideologically linear from left to right. See Bernard Grofman and Scott L. Feld, "If You Like the Alternative Vote (a.k.a. the Instant Runoff), Then You Ought to Know About the Coombs Rule," *Electoral Studies* 23 (2004): 647. Nonetheless, because the C-force numbers described in this report are based on models of electorates that are ideologically linear in this way, *Survivor*-style voting can be included among the class of Condorcet-consistent methods for the purposes of comparative C-force analysis.

53. Edward B. Foley, "The Constitution and Condorcet," *Drake Law Review* 70 (2022): 543, 560.

54. See James E. Green-Armytage, T. Nicholaus Tideman, and Rafael Cosman, "Statistical Evaluation of Voting Rules," *Social Choice and Welfare* 46, no. 1 (2016): 183, 201 (calling BTR "Condorcet-Coombs," because it modifies the Coombs elimination procedure in a way to be Condorcet compliant, and finding Condorcet-Coombs more vulnerable to strategic voting than other Condorcet-compliant electoral methods).

55. Most-preferred voting is also closely related to the total vote runoff method. See Edward B. Foley, "Total Vote Runoff: A Majority-Maximizing Form of Ranked Choice Voting," *New Hampshire Law Review* 21, no. 2 (2023): 323; Edward B. Foley and Eric Maskin, "Alaska's Ranked Choice Voting Is Flawed. But There's an Easy Fix," *Washington Post*, November 1, 2022. But most-preferred voting is even simpler insofar as it does not require the recalculation of preference points as part of its elimination procedure. Nor, in order to be a Condorcet-compliant method, does it require calculation for partial points for unranked candidates; instead, unranked candidates can be awarded zero points (as described in the text above), and the candidate who beats all others head-to-head still prevails.

56. See Foley, "The Nomination and Election of Statewide Candidates," *Illinois Law Review* (October 2024), for further development of most-preferred voting. There is another method, round-robin voting, which mathematically is very close to most-preferred voting but operates in a different way. See Edward B. Foley, "Tournament Elections with Round-Robin Primaries: A Sports Analogy for Electoral Reform," *Wisconsin Law Review* (2021): 1187.

57. Because this was a voter-initiated constitutional amendment, it must be endorsed by the voters in a second consecutive even-numbered election year, according to the provisions of Nevada's state constitution. "Nevada Question 3, Top-Five Ranked-Choice Voting Initiative (2022)," Ballotpedia.

58. See Nathan Atkinson, Edward B. Foley, and Scott Ganz, "Beyond the Spoiler Effect: Can Ranked Choice Voting Solve the Problem of Political Polarization?," Georgetown McDonough School of Business Research Paper No. 4411173, *Illinois Law Review* (October 2024) (showing significant divergence between different tabulation methods of ranked-choice ballots when an electorate is highly polarized; although the computer simulations that show this divergence were based on a "final four" system of the kind used in Alaska, a "final five" system of the kind considered in Nevada would likely show a similar or even greater divergence, because a candidate close to the electorate's median voter is even more likely to be among the top five candidates in a nonpartisan primary than among the top four, and this candidate will prevail in a MPV form of RCV but would not prevail in an LPR form of RCV).

59. After Purple is eliminated, Blue has 19 percent of first-choice votes, and Red has 22 percent, but these two candidates still remain behind Ultramarine and Scarlet in the number of first-choice votes, who remain at 30 and 29 percent, respectively.

60. For further illustration of this point, see Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

61. These profiles are derived from the Cooperative Elections Study (CCES). For a description of the methodology, see Nathan Atkinson, Edward B. Foley, and Scott Ganz, "Beyond the Spoiler Effect: Can Ranked Choice Voting Solve the Problem of Political Polarization?," Georgetown McDonough School of Business Research Paper No. 4411173, *Illinois Law Review* (October 2024).

62. Whether Nevada's electoral politics would immediately resemble the computer simulations if the "final five" system were adopted depends in part on factors such as the effect of incumbency and the self-selection of potential candidates. Nevada's two current US senators are fairly moderate Democrats, and therefore the advantage of incumbency may help to protect them from a serious challenge from more progressive Democrats to their left.

63. The computer simulations yielding these numbers were conducted for a "final four" rather than a "final five" system. But results would be similar in either case. If anything, a "final five" system would likely produce an even greater difference in C-force scores between LPR and MPV because adding a fifth candidate to a Condorcet-compliant election in a highly polarized electorate with a bimodal distribution of voters will give the Condorcet-compliant procedure one more candidate with a chance to be closest to the median voter, whereas this additional candidate is simply likely to be eliminated early in the LPR procedure.

64. A new and important paper on the potential effect of Nevada's "final five" system in that state suggests that there are specific factors associated with the state's political culture that mitigate the effect of its polarization. Most notably, unlike in

other states, former president Trump has tended to support more traditional Republican candidates rather than the kind of MAGA extremists he has supported elsewhere. As a consequence, LPR may be more successful in avoiding the election of extremist candidates in Nevada than in other states with similar levels of polarization. See Jeremy Gelman, Evan Pristos, and Benjamin Reilly, "The Consequences of a Top-5/RCV System in Nevada: Advantaging Moderates but Sidelining Third Parties?," SSRN, April 27, 2024.

65. Tied with Delaware.

66. The methodology assumes that there are ten candidates in the nonpartisan primary. These ten candidates are drawn (randomly) from the state's profile of voters. In the nonpartisan primary, voters then choose the single candidate closest to them (in either direction). This emulates the simple plurality method of Alaska's nonpartisan primary. The top four candidates then advance to the general election, as in the Alaska system. Because the Alaska system is nonpartisan, there is no assumption about number of parties.

67. The online appendix to this chapter contains the calculations derived from the simulations for all fifty states: https://kb.osu.edu/handle/1811/105337.

68. This analysis is in no way intended to suggest that Nevada voters should not adopt the pending proposal for a "final five" system as it is currently drafted. For one thing, the legal language that will take effect if the measure is adopted describes the state's RCV tabulation procedure in broad enough terms that it arguably could encompass the Condorcet "total-vote runoff" method that is very similar to the most-preferred voting method described in this chapter. The relevant legal language simply calls for eliminating the candidate with the "fewest votes" without specifying whether this phrase means fewest total votes or fewest first-choice votes. While it's most likely that this language was intended to convey the latter meaning (fewest first-choice votes), the plain text is obviously capacious enough to encompass the former meaning (fewest total votes). Adoption of the measure therefore leaves open the possibility that a Condorcet-compliant form of RCV may be employed as a way to implement the new system. Even if this were not the case, it would be harmful to building momentum for electoral reform in other states that would be Condorcet compliant for this specific electoral reform proposal to be defeated.

69. For an analysis of why Condorcet-compliant electoral methods are the fairest way to determine an election's winner based on the divergent set of voter preferences, see Edward B. Foley, "Maximum Convergence Voting: Madisonian Constitutional Theory and Electoral System Design," Ohio State Legal Studies Research Paper No. 868, *Florida Law Review* (forthcoming).

70. See Sarah E. Anderson, Daniel M. Butler, and Laurel Harbridge-Yong, *Rejecting Compromise: Legislators' Fear of Primary Voters* (New York: Cambridge University Press, 2020).

71. Speaker Mike Johnson's condemnation of the bipartisan border bill as "dead on arrival" in the House of Representatives was undoubtedly a consequence of the existing electoral system (partisan primaries followed by plurality-winner general elections). See Briana Reilly, "Johnson Calls Senate Border Deal 'Dead on Arrival' in House," *Roll Call*, January 26, 2024. If the House were elected by means of a Nevada-style system of a nonpartisan "final five" primary followed by RCV, especially if the RCV method were Condorcet compliant, there is every reason to think that the bipartisan border bill would be able to secure passage in the House led by a Speaker who governed according to median rather than extreme right-wing preferences.

72. Eric Maskin has proposed a form of Condorcet-consistent voting that, under certain specified conditions, is resistant to strategic manipulation. See Eric Maskin, "A Condorcet Voting Rule That Is Strategy-Proof," Scholars at Harvard, February 2023. This method deserves further development and consideration, but given the need to educate the public on the basic principles of Condorcet-consistent electoral procedures, discussion of the distinctive features of Maskin's proposal—which involve eliminating candidates based on the heterogeneity of lower-ranked preferences among voters who rank a particular candidate first—is best deferred until after simpler Condorcet-consistent methods gain a significant degree of public acceptance.

73. If voters abstain from the one-on-one that does not include their preferred candidate, then they risk having the election decided without their participation. Suppose, for example, that Blue beats Red 51 percent to 49 percent because Purple's supporters weigh in on this matchup, but proponents of both Blue and Red abstain in the Purple-versus-Red and Purple-versus-Blue matchups, respectively. Then, if Blue's supporters are 40 percent of the electorate, and Red's are 35 percent, then the result of the Purple-versus-Red matchup will be Red defeating Purple 35 percent to 25 percent, and the result of the Purple-versus-Blue matchup will be Blue defeating Purple 40 percent to 25 percent. This outcome will make Blue the election's winner, having defeated both opponents one-on-one, an outcome that is obviously worse from the perspective of Red's supporters than if Purple had won. Thus, Red's supporters have an incentive not to abstain in the Purple-versus-Blue matchup, in order to have Purple prevail. Likewise, if Blue's supporters can't be sure that Blue will beat Red 51–49, then Blue's supporters also have an incentive to support Purple in the Purple-versus-Red matchup. Thus, supporters of both Blue and Red have an incentive to participate in a way that will cause Purple to be the Condorcet winner, rather than to abstain in the hope of defeating the Condorcet winner.

74. Duncan Black proposed this method for electing a candidate when there is no Condorcet winner who is preferred by more voters over each other candidate. Duncan Black, *The Theory of Committees and Elections* (New York: Cambridge University Press, 1958). Round-robin voting is a slight modification of Black's method; see Edward B. Foley, "Tournament Elections with Round-Robin Primaries: A Sports Analogy for Electoral Reform," *Wisconsin Law Review* (2021): 1187.

75. Edward B. Foley, "Maximum Convergence Voting: Madisonian Constitutional Theory and Electoral System Design," Ohio State Legal Studies Research Paper No. 868, *Florida Law Review* (forthcoming).

76. These two examples from the 2022 midterms, and others like them, show the danger of relying on data from previous elections where lowest-plurality runoff has been used to argue that this method will virtually always elect the Condorcet winner. See Nicholas Stephanopoulos, "Finding Condorcet," *Washington and Lee Law Review* (forthcoming). The problem with relying on this previous data is that it does not account for two key factors: first, the increasing partisan polarization of the electorate making it increasingly difficult for a moderate candidate close to the electorate's median voter to win a lowest-plurality runoff election; second, and perhaps even more important, moderate candidates have no incentive to run in a lowest-plurality runoff election where they will be eliminated before the two more extreme candidates. A candidate like Rob Portman has no more incentive to run in a lowest-plurality runoff election than in the current system of partisan primaries followed by a plurality-winner general election. On these key points, see Nathan Atkinson and Scott Ganz, "Robust Electoral Competition: Rethinking Electoral Systems to Encourage Representative Outcomes," Georgetown McDonough School of Business Research Paper No. 4728225, *Maryland Law Review* (2024).

77. Edward B. Foley and Eric Maskin, "How to Depolarize American Politics," *Project Syndicate*, February 8, 2024.

78. Edward B. Foley, "A 'Top Three' Version of California's 'Top Two' Elections," *Common Ground Democracy*, February 11, 2024.

79. Liz Cheney, *Oath and Honor: A Memoir and a Warning* (New York: Little, Brown & Co., 2023).

80. "U.S. House of Representatives Special Election in Alaska, 2022 (June 11 Top-Four Primary)," Ballotpedia.

81. *Jenness v. Fortson*, 403 U.S. 431 (1971).

82. One possible, and partial, exception to this point would be a procedure in which voters in the primary identified only a first and second choice among the candidates on ballot. A candidate marked as a voter's first choice would receive one vote, and a candidate marked as a voter's second choice would receive half a vote. The three candidates whose total sum of these full and half votes would advance to the general election. The simplicity of this procedure would make it a suitable component of the "top three" system, and it has the advantage of tending to reward less-polarizing candidates. Even if a candidate does not receive as many first-choice votes as some others, by accumulating a large number of half votes as a well-liked second choice of many voters, this candidate might beat out for one the top three spots a more polarizing opponent who, despite more first-choice votes, has far fewer second-choice votes.

83. See *Maine Republican Party v. Dunlap*, 324 F.Supp.3d 202 (D. Me. 2018).

84. In 2018, the use of RCV in Maine enabled a centrist Democrat, Jared Golden, to defeat a more extreme Republican, Bruce Poliquin, in a race for one of the state's congressional seats. See "Maine's 2nd Congressional District Election," Ballotpedia, 2018. But that race did not involve a significant third-party challenge by a moderate attempting to fill the gap between two polarized major-party nominees. Instead, the additional candidates in the race were fringe figures who could only play the role of spoiler. The true test of Maine's system will be in a statewide election where there isn't an established centrist incumbent like Susan Collins or Angus King but instead a genuine three-way race between Blue, Purple, and Red candidates vying for an open seat.

85. Benjamin Reilly, "Centripetalism and Electoral Moderation in Established Democracies," *Nationalism and Ethnic Politics* 24, no. 2 (2018): 201–221.

86. See William A. Galston, "Fusion Voting Could Lower the Temperature," *Wall Street Journal*, October 3, 2023; Daniel Cantor and William Kristol, "What Is 'Fusion Voting'? Just a Way to Save the Country, That's All," *New Republic*, June 15, 2024; "Open Letter from Scholars in Support of Re-legalizing Fusion Voting," *Medium*, July 11, 2024.

87. From the voter's perspective in terms of casting a ballot, all ranked-choice voting systems operate in the same way: the voter ranks candidates in order of preference. The difference is solely in the method of determining a winner based on all the preferences on all the ballots. As a matter of election administration, given existing computer technology, there shouldn't be any significant difference in the computational demands of the different methods under consideration here. The delay associated with any RCV method is caused not by the computation itself but by the need to receive all mailed ballots in order to conduct the computation. While media outlets can more easily project (in other words, predict) winners in a simple plurality election before all mailed ballots have been counted, it is more difficult for the media to make such projections (predictions) in RCV systems given that a candidate's lead can change in more complicated ways because of the multiple rankings

on each ballot. Officially certified results take essentially the same amount of time, because they require counting all the valid mailed ballots. Finally, if any form of RCV is thought to be too burdensome or complicated for voters (contrary to the experience of voters in Alaska, Maine, Australia, and elsewhere), then there are other innovative electoral systems that attempt to emulate Condorcet-compliant methods more simply. See Foley, "The Nomination and Election of Statewide Candidates," *Illinois Law Review* (October 2024).

88. Additional research needs to be done on various Condorcet-consistent RCV systems. One new idea suggested by Wes Holliday is to employ an Alaska-style "top four" system and elect either the Condorcet winner, if there is one; if not, then, between the two candidates who suffer only one head-to-head defeat against another candidate (because with four candidates and no Condorcet winner, mathematically there must be two and only two of these), to elect the candidate whose single head-to-head defeat has the smallest margin. Wesley H. Holliday, "A Simple Condorcet Voting Method for Final Four Elections," *SSRN* (July 7, 2024). https://dx.doi.org/10.2139/ssrn.4758509. This proposal is a version of the "minimax" method applied to a four-candidate election. Like any version of minimax, it has the virtue of electing the candidate who is either the Condorcet winner or the candidate closest to being a Condorcet winner. See Foley, "Maximum Convergence Voting: Madisonian Constitutional Theory and Electoral System Design," *Florida Law Review* 76 (forthcoming).

89. See Nathan Atkinson, Edward B. Foley, and Scott Ganz, "Beyond the Spoiler Effect: Can Ranked Choice Voting Solve the Problem of Political Polarization?," Georgetown McDonough School of Business Research Paper No. 4411173, *Illinois Law Review* (October 2024).