6

Strategic voting in single-member dual-ballot systems

In the last two chapters, I have investigated strategic voting equilibria in SMSP and in PR elections, two of the three electoral systems that Duverger originally explored in his seminal work in the 1950s. In this chapter, I consider the dual-ballot system, the subject of what was originally Duverger's third proposition.

For dual-ballot systems, Duverger makes no specific claim regarding an equilibrium number of parties. He does argue that such systems produce no incentives to vote strategically in the first round, concluding that "the variety of parties having much in common does not adversely affect the total number of seats they gain since in this system they can always regroup for the second ballot" (Duverger 1954: 240). But this leads only to an expectation that there will be "more than two" parties. The literature on electoral systems has not since produced any more specific prediction and, in a recent survey, Sartori (1994:67) opines that "the reductive effects on the number of parties of the double ballot cannot be generally predicted with any precision" (an opinion shared by Bartolini 1984:118).

This chapter explores the possibility of saying something more precise about the dual ballot's effect. I shall argue two main theoretical points. First, when voters are concerned only with the outcome of the current election and have rational expectations, strategic voting plays a role in dual-ballot elections similar to that it plays in single-ballot plurality elections: acting to limit the number of viable first-round candidates. Second, the limit theoretically applied on the number of first-round candidates is $M + 1$, where M refers to the number of first-round candidates that can legally qualify for the second. This is the limit suggested by Shugart and Taagepera (1994), based on their reading of Cox (1994). It is also, of course, the same limit as found in the previous two cases, if one thinks of the "number of first-round candidates that can legally qualify for the second" in a runoff system as equivalent to the district magnitude in other systems.

In addition to further generalizing the $M + 1$ rule, I shall also argue that in practice strategic voting in the first round of runoff elections is probably much rarer than the theoretical benchmark established by the model. This is partly because the informational preconditions of rational expectations are greater, and partly because optimal strategies are more complex in dual-ballot than in single-ballot systems. Thus, practically speaking, it may be more difficult to predict the number of parties under dual-ballot systems, as Bartolini and Sartori assert.[1]

The rest of the chapter proceeds as follows. Section 6.1 notes in a preliminary way the existence of strategic voting incentives under majority runoff provisions. Section 6.2 presents a formal model of strategic voting under a top-two majority runoff system, when voters care only about the outcome of the current election and have rational expectations. Section 6.3 analyzes the kinds of equilibrium phenomena that the model supports. I find, in the pure model, that there are always voters in whose interest it is to vote strategically when there are three or more candidates – consistent with the Gibbard-Satterthwaite theorem (Gibbard 1973; Satterthwaite 1975) but contrary to the thrust of Duverger's discussion – and that strategic voting acts in top-two runoff elections to limit the number of viable candidates to three, just as it limits the number of viable candidates in plurality elections to two. Section 6.4 discusses various relaxations of the pure model's assumptions. Section 6.5 concludes.

6.1. STRATEGIC VOTING IN RESTRICTIVE MAJORITY RUNOFF ELECTIONS

Duverger's theoretical discussion as to why there should be more than two parties in dual-ballot systems is very brief. It consists of little more than the single sentence quoted above, according to which "the variety of parties having much in common does not adversely affect the total number of seats they gain since in this system they can always regroup for the second ballot" (Duverger 1954:240). Looked at closely, this comment fails to convince in the case of top-two runoffs.[2]

To see this, consider the following unidimensional spatial example: There are two center parties (A and B), one left party (L), and one right party (R) competing for one seat under a top-two majority runoff system.

[1]Strategic voting in the *second* round of a runoff race is a different matter. If more than two candidates survive to the second round (which is held under plurality), then there may be a substantial amount of strategic voting, since the first round results have provided excellent information on the relative standings of the candidates. In this chapter, I focus on the first-round incentives.

[2]Duverger, of course, was thinking of the Third Republic's more permissive system when he wrote in the 1950s.

The percentages of voters in the electorate who support each party are as follows: L – 31%, A – 25%, B – 15%, and R – 29%. In this case, it is easy to see that, if each center party puts up a candidate (and its voters follow the cue of the leadership and vote for this candidate), then L and R will make it to the second round, leaving the center parties (and voters) with a poor choice. On the other hand, if the two center parties coalesce in the first round, then they will make it to the second round with L, and then win the runoff. So, in this case, "the variety of parties having much in common" *does* "adversely affect the total number of seats they gain." Party elites have an incentive to coalesce (up to a point) and, if they fail to, voters who favor B have an incentive to vote strategically for A.

In fact, incentives to vote strategically in the first round of a majority runoff election can occur even with only three candidates and even under more permissive systems. This much is known from the very general social choice theorems of Gibbard (1973), Satterthwaite (1975), and Schwartz (1982). Nonetheless, these general theorems do not tell us anything about the nature, frequency, or plausibility of strategic voting in majority runoff elections. The only guidance in the literature is provided by Sartori (1994:63), who asserts the following:

> At the first round of voting the voter can and does freely express his first preference. His freedom is maximal when there is no threshold (or only a minimal barrier) for admission of the candidates to the second ballot .... On the other hand, the calculating voter's freedom is "less free" when the admission to the run-off is filtered by relatively high thresholds, especially when only the two front runners are admitted to the second round.

To investigate further the theoretical nature and frequency of strategic voting in dual-ballot systems, I develop in the next section a game-theoretic model of strategic voting in a top-two majority runoff election. As will be seen, the model's equilibria are consistent with Sartori's intuitive insights.

6.2 A TOP-TWO MAJORITY RUNOFF ELECTION WITH *K* CANDIDATES

Now it is time to describe the model. Because there are (potentially) two rounds of voting under runoff rules, the model here is not as direct a generalization of the SMSP model as was the case for SNTV and LRPR in Chapter 5. Nonetheless, the model does follow the same lines as the SMSP model, *mutatis mutandis*.

Imagine K candidates competing in a single-member district under top-two majority runoff rules. After first-round votes have been cast, either a majority winner exists and is given the seat, or the top two finishers go on to meet in a runoff election. The candidate with the most votes wins the runoff, if any is held.

There are n voters in the district. I assume that voting is costless (or compulsory), thus focusing attention on vote choice rather than turnout. I also assume that voters care only about who wins the seat at stake in the election. This last assumption rules out, among other things, voters who care about: the margin by which the seat is won; who makes the runoff (beyond the effect that this has on who ultimately wins the seat); or the outcome of other elections that may be affected indirectly by the voters' choices in the current election (e.g., future elections in their own district or contemporaneous or future elections in other districts). I discuss voters who care about more than the outcome of the current election below.[3]

Although each voter knows her own preferences, she is uncertain about the preferences (or type) of other voters. I model this uncertainty formally by assuming that there exists a commonly known distribution function, F, defined over voter types.[4]

Each voter chooses her vote in order to maximize her expected utility, something that depends not just on her preferences over candidates but also on her *expectations* about how well each candidate will do in the first round. For example, suppose a voter thinks that there is no chance that any candidate will win a majority in the first round; that candidate 1 will top the polls in the first round; and that, conditional on *some* candidates being tied for second, it will almost certainly be candidates 2 and 3. Such a voter is presented with only one real chance of affecting the outcome: She should vote in such a way so as to produce the better of the two most likely runoff pairings, which pit 1 versus 2 and 1 versus 3. Which of these pairings is better of course depends both on her preferences among candidates 1, 2, and 3 *and* on her estimates of who will win in the two pairings.

If voters believe that, conditional on there being any tie for second at all, there are *many* different pairs of candidates who might be tied with

[3]Formally, each voter i assigns a Von Neumann-Morgenstern utility u_{ik} to the outcome "candidate k wins the seat." Voter utilities can be rescaled in the standard fashion so that victory of the most-preferred candidate yields a utility of 1, while victory of the least-preferred candidate yields a utility of 0. After this rescaling, voter i's preferences (or voter i's *type*) can be described by the vector $u_i=(u_{i1}, \dots ,u_{iK})$, an element in the set $U = \{u \in R^K\text{: } \max\{u_k\}=1 \;\&\; \min\{u_k\} = 0 \;\&\; u_k = u_j \text{ only if } k = j\}$. (Note that the definition of the set U rules out voter indifference between outcomes. This is a convenient but inessential assumption.)

[4]I follow Palfrey (1989) and Cox (1994) in assuming that F has no mass points. Myerson and Weber's work (1993) shows that this assumption is not crucial. Note that from the perspective of a given voter, any other voter is an independent draw from U.

non-negligible probability, then their expected utility calculations are rather complex (see Appendix B). However, just as in plurality elections it often becomes clear who is in the running for the seat (who might be tied for first), so in runoff elections it may become clear who is in the running for the second runoff spot (who might be tied for second). And, just as in plurality elections outcome-oriented voters may strategically desert hopeless candidates in order to secure a better victor, so in runoff elections outcome-oriented voters may desert hopeless candidates in order to secure a better runoff pairing, i.e., a better lottery over final outcomes.

Given the model's postulates, voter rationality implies a certain consistency between a voter's beliefs about other voters' preferences and her expectations about the likely outcome. If everyone is supposed to entertain the same expectations about what the outcome will be, and everyone acts rationally, then there should be an equality between (1) the expected vote share for candidate j and (2) the vote share for candidate j implied by optimal behavior on the part of all voters in reaction to what everyone expects. That is, expectations are assumed to be "rational" in this model as in Chapter 4.

A final (and dispensable) condition on voter expectations that I shall impose limits the races covered to those in which a first-round majority is not in the cards. Formally, I shall assume that the probability of the event "candidate j is one vote shy of a majority" is negligible relative to the probability of the most likely second-place tie. Thus, instrumental voters do not worry about their vote putting a favored candidate over the top in the first round; they only worry about their vote deciding who will be in the runoff. I consider the general case in Appendix B and briefly in Section 6.3.

The (symmetric Bayes-Nash) equilibrium conditions for the model are then two. First, every voter votes so as to maximize her expected utility, given expectations. Second, the expectations satisfy the rational expectations condition.

6.3 SOME EQUILIBRIUM RESULTS

In this section, I describe some general characteristics of strategic voting equilibria under top-two runoff rules.[5] I shall assume throughout that voters are uncertain as to who will win any given runoff pairing. Formally, denoting by p_{jk} the probability of candidate j winning a runoff,

[5]Existence of equilibrium is not a problem. A formal proof of existence is given in Myerson and Weber (1993). Although stated for single-ballot systems, the same proof works (*mutatis mutandis*) for dual-ballot systems as well.

when pitted against candidate k, I assume that $0 < p_{jk} < 1$ for all j,k. Note that because the distribution F is common knowledge, the parameters $\{p_{jk}\}$ are also (see Appendix B).

Four is a crowd

The first theoretical result I wish to note concerning strategic voting in the first round of elections held under top-two majority runoff rules is that fourth- and lower-place candidates will often be ruined by strategic voting in the first round. To demonstrate this, consider first how a purely outcome-oriented voter, of the type under study here, thinks about an election. Such a voter essentially asks: When could my one vote affect the outcome? The answer is that there are only two ways that one vote can affect the outcome. First, that one vote can put some candidate over the top in the first round. As I have assumed that the probability of any candidate being one vote shy of a majority is negligible, this possibility can be ignored. Second, one vote can break or make a tie for second place, thus affecting who gets into the runoff election. Since I have assumed that the probability of the event "candidate j is tied for second" is *negligible* in comparison to the probability of the event "candidate 3 is tied for second," whenever $\pi_j < \pi_3$ and n is sufficiently large, voting for any candidate $j > 3$ (such that $\pi_j < \pi_3$) is almost certain not to affect the outcome in large electorates. Such a vote is, in other words, negligibly different from abstaining, *even conditional on a tie of some sort occurring.* Accordingly, in order to prove the claim made above, one need only show that the voter is strictly better off voting for one of the top three candidates (1, 2, or 3) than abstaining. This is an elementary consequence of the assumptions that all voters have strict preference rankings of the candidates and that voting is costless. Thus we have:

> *Proposition 1:* For large enough electorates, the expected vote shares garnered by candidates expected to finish fourth or lower converge to zero.

In other words, for large enough electorates, it becomes obvious that any fourth- or lower-place candidate is out of the running for a runoff spot, at which point no outcome-oriented voter has any reason to vote for them. So, speaking loosely (because dynamically in the context of a static model), if a candidate falls to fourth, strategic voting kicks in and reduces him to a zero vote share.

There are two kinds of limit equilibria that Proposition 1 allows in large electorates. One type, which I shall call *Duvergerian* equilibria, are such that all candidates expected to finish fourth or lower have negligible vote shares. That is, only 3 of the K candidates end up with non-negligible vote shares, the rest being reduced nearly to zero by strategic voting. A second type, the *non-Duvergerian* equilibria, entail ties for third between two or more candidates. None of these third-place candidates suffers from strategic desertion because each has as good a chance as any of the others at making the runoff (or, more precisely, at tying for second).

A dynamic story that provides either a justification or a critique, depending on one's point of view, of the static result just articulated is the following. Imagine a candidate who falls into fourth or lower place in the polls leading up to the first-round election. In response to the poll, some of the candidate's least-committed supporters desert him. This pushes him lower in the (next) polls and causes more supporters (those a bit more committed) to desert. The unraveling continues until the candidate has no instrumental support left. This story does not require a huge electorate and invocation of a law of large numbers. It requires many polls, myopic adjustment, and an opportunity for "momentum" to build for certain candidates at the expense of others (cf. Johnston et al. 1992:222; Forsythe et al. 1993; Fey 1995).

Strategic desertion of first-place candidates

Under majority runoff procedures, it may sometimes be advantageous to desert a stronger and more preferred candidate for a weaker and less preferred candidate in the first round. Suppose, for example, that there are three candidates, that a voter prefers candidate 1 to 2 to 3, and that the candidates' expected vote shares are $\pi_1 > \pi_2 \geq \pi_3$. Under the conditions of the model, the only situation in which a single vote is decisive that need be considered in large electorates occurs when candidates 2 and 3 tie for second, with candidate 1 in first place. Given that this event occurs, the voter would vote for candidate 2, if she preferred that 1 face 2 in the runoff; and for candidate 3, if she preferred that 1 face 3 in the runoff; and indifferently for any candidate if she was indifferent between the runoff pairings. Thus, she might end up voting for her least-favored candidate (3) in the first round, if that ensured a victory for her most-favored candidate (1) in the runoff.

The general point as far as what expectations can be (limits of) rational expectations is embodied in the following proposition:

> *Proposition 2:* For large enough electorates, the expected vote shares of the candidates expected to finish first and second must be equal.
> *Proof:* Similar to that of Proposition 1.

A candidate who has more votes than he needs to get into the runoff will, in other words, be relieved of those votes by strategic voters.

It should be stressed that voters who desert a first-place candidate who has "too many" votes (yet not enough to have a shot at winning in the first round) adopt a risky strategy: If too many of 1's supporters desert him in the first round, seeking to help the "weaker" of his two closest first-round competitors get into the runoff with him, so to ensure his ultimate victory, then 1 may fail to get into the runoff to begin with. The current equilibrium concept (Bayes-Nash) does not deal with these aspects of "Chicken" particularly well (about as well as the Nash concept deals with coordination problems in the Battle of the Sexes; on which see Farrell 1987).

When a first-round majority is in view

What happens if one relaxes the assumption that no voter thinks the chance of a first-round majority need be considered? Does relaxing this assumption affect the results in Proposition 1 concerning strategic desertion of hopeless candidates? If some candidate is certain to win a majority in the first round, then outcome-oriented voters have no reason to desert their first preferences, even if they rank low in the polls. Aside from this extreme situation, however, the results do not change. A fourth- or lower-place candidate who does not have a significant chance at tying for second will also not have a significant chance at winning outright in the first round. Thus, there will not be any new reason to support him, just because some other candidate might win the seat in the first round.[6]

The possibility of a first-round majority similarly seems to have little effect upon the strategic desertion of first-place candidates. If a first-round majority for 1 were possible, would his supporters have a new reason to stick with him? Putting 1 over the top in the first round is valuable, from the point of view of the final outcome, only if he might lose the runoff. But, conditional on 1's having enough support to win a majority in the first round, he cannot lose the runoff. Thus, the only situations that matter are those in which 1 does not have enough votes to win a majority, in which case there *will* be a runoff in which he *might* be vulnerable. Thus, the need to assure the best possible runoff pairing remains paramount (for purely outcome-oriented voters) as long as there is any chance of a runoff.

[6]This conclusion assumes away the possibility that the probability function g_n (on which see Appendix B) is such that candidate 4 will finish either one vote shy of a majority, or much lower, on average coming in fourth.

Strategic voting in single-member dual-ballot systems
An M+1 rule for top-M majority runoff systems

It is possible to generalize the model presented above from top-2 to top-M systems.[7] The general rule, as far as the strategic desertion of weak candidates goes, is this: If the top M finishers in the first round get to go on in the second, then no more than $M + 1$ candidates are expected to get positive vote shares in the first round (in Duvergerian equilibria).

6.4 VIOLATING SOME ASSUMPTIONS

The results of the pure model presented above provide a theoretical benchmark against which one might judge real-world elections. Voters in the model are highly informed and have arrived at a (self-fulfilling) consensus that certain candidates are out of the running. Caring only about the outcome of the current election, they therefore have no reason to vote for such candidates. In this section, I consider a variety of ways in which real-world voters and elections might depart from this idealized world, and speculate on the consequences as far as strategic voting goes.

Voters who care about more than who wins the current election

It is obvious that the results stated above are sensitive to relaxing the assumption that voters care only about who wins the current election. If, for example, some voters derive a consumption value from voting for their favored party in the first round, then such consumption values will overwhelm any instrumental values in large electorates (because the probability of one vote affecting the outcome is infinitesimal). Noninstrumental voters of this kind will therefore not vote strategically. It remains true, however, that those voters who *are* outcome-oriented will desert hopeless candidacies. So the result of Proposition 1 becomes: Candidates expected to place no better than fourth lose all their *instrumental* supporters in large electorates.

A different kind of instrumental voter would be one who did not look ahead to the runoff, instead treating the first round as an election in which there were two equally valuable prizes – *viz.,* the runoff spots – to be awarded. This case may not be *formally* different from that consid-

[7] In top-M systems, $M > 2$, it is no longer possible to deduce analogs to the probabilities $\{p_{jk}\}$. Moreover, whereas under top-2 rules voters can assume sincere voting in the second round, under top-M rules they may have to anticipate the nature of the strategic voting equilibrium in the second round. Nonetheless, one can take the analogs to the p_{jk} probabilities as primitives, or take voter preferences over runoff fields as primitives, and proceed as in the current model.

ered here: In a zero-foresight model, voters continue to have a utility ranking over runoff pairings; it is just that this ranking does not depend on their beliefs about who will win the runoff. Substantively, however, there may be some important differences, as I discuss later.

Yet another kind of voter would care about the margins of victory compiled in the first round. It is plausible that voters might care about margins, because these could affect elite bargaining between the first and second round. In a top-two system, a hard-left voter who thought it virtually certain that a center-left and a right candidate would make it to the runoff, might hope to strengthen the hard-left candidate's bargaining position (in dealing second-round support for policy concessions or pork) by continuing to vote for her, even if the hard-left vote total was too small to figure in the first-round outcome. Such considerations obviously may substantially affect patterns of strategic voting.

A final kind of instrumental voter might care about "other elections" (e.g., those held in other districts). I shall say little about other elections except to note that they are clearly relevant, especially when the issue of entry is brought into view. To mention the case of France, which uses not a top-two but a more complicated runoff system, one finds that the Right put up only one candidate in almost all districts in the 1988 elections, having divided the constituencies up beforehand (Cole and Campbell 1989:161).

Nonrational expectations

In practice, voters have virtually no instrumental incentive to pay attention to politics (Downs 1957; Popkin 1991). Learning more about candidates or about candidates' chances will simply produce a better vote; in order actually to produce a better outcome, the voter's vote would have to be decisive, something that is extremely unlikely. One expects, therefore, that many voters will lack well-developed perceptions of the candidates' chances.

Looking at the matter pragmatically, when would one expect any approximation of the rational expectations condition? Consider two cases: where there is a single clear leader in the first round, with a close race for the second spot; and where there is a close three-way race.

In the first case, if it becomes clear *to voters* that A is ahead, with B and C in a dead heat for second, will this motivate strategic voting? It depends on what voters think about the likely runoff pairings (A vs. B and A vs. C). If everyone expects A to win no matter which of B or C make it to the runoff, then there is little point, from the perspective of affecting the outcome, of deserting a hopeless first choice in the first round. This is true even for an elite actor who has a substantial chance of affecting the first-round outcome, or for a voter with greatly exaggerated impressions of her own electoral importance. If everyone expects A to *lose* no matter which of B or C make it to the runoff, on the other hand, then there is a substantial reason to vote strategically: The first round is really a choice of the ultimate victor. Finally, if everyone expects A to win against B but to lose against C then there is again a substantial reason to vote strategically, especially if B and C are ideologically closer to one another than either is to A.

Schmidt (1996, N.d.) argues that something like this last scenario played out in the fateful Peruvian presidential election of 1990. The common expectation in the final week of the campaign was that A (Vargas Llosa, the right-wing candidate) could beat B (Alva Castro, one of two centrist candidates vying for second place in the first round) but probably not C (Fujimori, the other viable centrist candidate). On the assumption that these were in fact the operative expectations just before the election, Vargas Llosa should have held his support and Fujimori should have benefited from a sizable strategic vote as the anti-Vargas Llosa forces coordinated on the best available vehicle to defeat him. The rapidity with which Fujimori was transformed from an obscure minor-party candidate with apparently no chance to the strongest challenger to Vargas Llosa – reminiscent of the rapidity with which presidential candidacies are made and unmade during the U.S. primary season (Bartels 1988) – is strong *prima facie* evidence that coordination among the anti-Vargas Llosa forces was the key to his rise. But Schmidt goes beyond this *prima facie* evidence. He uses disaggregated electoral returns to show that Vargas Llosa did indeed hold onto his support and that Fujimori did indeed benefit substantially from strategic voting. In addition, he provides some interview-based evidence that key elite actors actively fomented this strategic coordination.

Another case similar to the Peruvian was the enormously important Russian presidential election of 1996. In February 1996, the communist Gennadi Zyuganov led all other presidential aspirants in the polls, while the sitting President, Boris Yeltsin, languished in single digits. Yeltsin then hired a team of American campaign consultants who advocated the following strategy in a memo dated March 2: "There exists only one very simple strategy for winning: first, becoming the only alternative to the Communists; and second, making the people see that the Communists must be stopped at all costs" (Kramer 1996:33). This of course is precisely the strategy that one would pursue in order to ensure that strategic coordination acted to one's benefit rather than to one's detriment. While there were numerous bumps in the road, this strategy appears to have contributed substantially to Yeltsin's victory (Kramer 1996).

What about the other case mentioned above? In close three-way contests, will there be plausible incentives to vote strategically? Elites again will have incentives to promote strategic behavior, but whether they will succeed is less clear. Suppose, for example, that A is highly likely to defeat either B or C in a runoff, and that B is highly likely to beat C. While supporters of weak parties who prefer A to B have an obvious strategy – vote for A – those who prefer B to A must ensure that A does not make the runoff, which entails *equalizing the vote between B and C*. It is not obvious that elites will be able to orchestrate the necessary balancing between B and C. At minimum, it seems a more difficult educational task than the usual "wasted vote" exhortations.

Things do not get any clearer if there is not a Condorcet winner – if, in other words, there is a cycle among A, B, and C. Taking the case of an "A beats B, B beats C, C beats A" cycle, many agents need to engage in an equalization strategy. Elites who prefer A, for example, will seek to maximize the probability that candidate C (who would beat A in a runoff) does not make the runoff, since this leaves A against B and leads to a victory for A. In order to maximize this probability, they must ensure that both A and B exceed C's vote total, which entails equalizing their expected votes.

One might again wonder whether elites could convince voters to go along with the vote balancing act they suggested. There are cases in which fairly exact equalization of votes has occurred under electoral systems different from top-*M* runoff. The nineteenth-century Birmingham Liberals, for example, sent voting instructions to their followers in each ward of the city in order to equalize their candidates' votes under the limited vote system then in operation (Ostrogorski 1902). But this feat of vote equalization occurred among voters of the same party and the theoretically required equalizations in runoff systems can cross party (or even left/right coalitional) boundaries.

Suppose one posits that voters will never cross the left/right boundary. Then something like what Duverger (1986) describes in French politics as bipolar multipartism would be in equilibrium under top-two runoff rules (N.B. These are *not* the French rules, which are less restrictive). The logic would be as follows. As long as one party from the left and one party from the right are expected to make it into the runoff, there is no pressure on either the left or the right to coalesce. This condition is certainly met when, as in 1988, the right puts up only one first-round candidate in most constituencies, with the left putting up two (Cole and Campbell 1989:161). It is also possibly met when there are two candidates from each party, as long as neither side is so strong that their parties finish one-two (in which case the ultimate outcome is probably a foregone conclusion anyway). But *lopsided* bipolar multipartism, say the

Left running three or more candidates to the Right's two, would present some clear pressures for consolidation on the Left: It would be likely, especially if the Left was not much larger than the Right, and the Left and Right candidates split their respective votes equally, that the two rightist candidates would finish in the top two spots in the first round. Anticipation of this result should prompt leftist elites to arrange withdrawals in the first round, or failing that, to provide the necessary information and cues to voters to produce a strategic desertion of one of the leftist candidates.

From this perspective it is interesting to note that, in the 1988 French elections, candidates on the far right (associated with Le Pen) did enter in substantial numbers. One reason for the traditional Right's decision to divide the seats up before the first round in that year may have been a desire to avoid splitting the Right's vote three ways.[8]

Shortsighted voters

I noted above that voters who do not look ahead to the runoff outcome may produce substantively different results from the farsighted voters considered here. Now it is time to show how this may be so. Consider again the case of a close three-way race between A, B, and C, with A a Condorcet winner, B beating C. With farsighted voters, any minor party supporters should desert their favored party and vote either for A, if they prefer A to B, or so as to equalize the vote totals of B and C, if they prefer B to A. With shortsighted voters (operationally taken to be those with additively separable preferences over candidates, who act simply to add the most-preferred first-round candidates to the runoff pair that they can, without considering his chances in the runoff), minor party supporters should also desert their favored party but they should vote for whichever of the three top candidates – A, B, or C – they most prefer. No equalization strategy is entailed; just a straight vote for the most-favored of the viable first-round candidates. Thus, if every candidate is seen as having an equally good chance of winning any runoff he happens to get into – or runoff probabilities do not even figure in voter calculations,

[8] With the actual French rules, which require a first-round vote exceeding 12.5% of the registered electorate to gain admission to the second round, there may be room for three parties on the Right, even if the Left puts up two. Suppose the Right collectively holds 51% of the voters in a given constituency, and splits those votes equally among three candidates, with the Left splitting equally between two candidates. If the turnout rate in the constituency exceeds about 73.5%, then all three Right candidates will make it into the second round (as will the two leftists). But if turnout falls below 73.5% (and above about 51%), then the two leftists will be the only ones to qualify for the second round.

because voters are myopic – then strategic voting under top-M procedures will look very similar to strategic voting under M-seat districts operating under the single nontransferable vote.

6.5 STRATEGIC VOTING IN NON-MAJORITARIAN RUNOFF SYSTEMS

As noted above, some dual-ballot systems are non-majoritarian: They do not require that a candidate win a majority of all votes cast in order to win a seat in the first round of voting. In this section, I briefly consider two such systems: the 40% rule used in Costa Rica (and elsewhere) and the double-complement rule proposed by Shugart and Taagepera (1994).

Under the 40% rule, any candidate who finishes first in the first round of voting *and* garners at least 40% of the first-round vote is declared elected. The 40% rule is thus a combination of a relative standard (the vote must exceed all others) and an absolute standard (the vote must exceed 40%). The impact of substituting the 40% rule for the more usual majority rule depends on whether there is a likely first-round winner or not. Suppose first that there is no such prospective winner, e.g., there are five candidates splitting the vote 25%, 25%, 20%, 20%, 10%. In this case, the two rules, 40% and majority rule, are likely to produce identical outcomes (a runoff between the two strongest first-round finishers) and so should induce similar patterns of strategic voting in anticipation of this outcome, aimed at producing the most favorable possible runoff pairing. Suppose next that a first-round winner looks likely, e.g., there are three candidates splitting the vote 44%, 35%, 21%. In this case, the 40% rule will likely produce the same outcome as ordinary plurality rule (victory for the strongest first-round candidate) and so should induce a similar pattern of strategic voting in anticipation of this outcome, with the third-place candidate suffering substantial desertions.

Another non-majoritarian runoff system, the double-complement rule of Shugart and Taagepera (1994), averages the relative standard required by plurality rule (i.e., $v_1 > v_2$, where v_1 and v_2 represent the vote percentages of the first and second candidates, respectively) and the absolute standard required by majority rule (i.e., $v_1 > 50\%$) to yield $v_1 > (v_2 + 50)/2$. This differs from the 40% rule in that, for example, a 40% vote share would win in the first round only if the second-place candidate garnered less than 30% of the vote. But the consequences for strategic voting are similar. If under the double-complement rule there is no likely first-round winner – e.g., there are three candidates with vote shares 42%, 41%, and 17% – then both the likely outcome and the strategic voting incentives set in train by anticipation of that outcome are similar to those under majority runoff. If, on the other hand, there is a likely first-round victor, then one expects some concentration of the vote, at least until it is no longer clear that there will be a first-round winner.

6.6 CONCLUSION

Duverger (1954) was wrong if, in his discussion of runoff elections, he meant to say that there were typically no reasons for voters to vote strategically. In top-two majority runoff elections with three or more candidates, voters *always* face incentives to vote strategically. And when there are four or more candidates, these incentives (in a frictionless model) destroy candidacies not in the running for a runoff spot, just as in plurality elections they destroy candidacies not in the running for a seat (in accordance with Duverger's Law). As a more general rule, top-M runoff elections can have at most $M + 1$ viable candidates, at least in the "Duvergerian" equilibria of the pure model.

Duverger was on better ground if he was merely asserting that as a practical matter voters under runoff rules do not vote strategically very often (or, as often as they do under plurality). Compare the information that a voter (or an elite agent) needs in order to cast a strategic vote under runoff and plurality rules. Under both systems, the voter needs to know that his favorite candidate is "out of the running," whether for first place in a plurality election, or for first or second place in the first-round of a runoff election. Voters in runoff elections will, in addition, probably want to know something about the likely outcome of the various possible runoff pairings, something that is hard to predict and unnecessary to predict under plurality rule. Consider also the nature of the strategy required. Under plurality rule, strategic voting is simple: It means voting for one's most-favored *viable* candidate. Under runoff rules, in contrast, strategic voting is often more complicated: It entails voting so as to equalize the vote totals of two viable candidates, so as to minimize the probability that a third viable candidate will make the runoff. Such fine balancing usually requires a substantial and sophisticated party organization to accomplish. In a nutshell, under runoff rules it is more difficult for elite actors to discern when it is in their interests to foment strategic voting, and, conditional on their deciding that it is worthwhile, it is more difficult to implement the appropriate strategy.

Having said this, however, there are still situations when strategic voting in top-two runoffs seems a plausible bet. And, as under plurality rule, anticipation of strategic voting in such situations ought to prevent the situations from arising in the first place. Two examples of this kind of effect were discussed in particular: the case of the divided center, and the case of lopsided bipolar multipartism.

The first of these cases involves unidimensional politics with a unified Left, a large Center split into two parties, and a unified Right. If the Center puts up two candidates in the first round, neither will make it to the runoff, leaving Center voters with a poor choice. If the Center coordinates, the unified Center candidate will make it to the runoff and win. The incentives in this case are fairly clear and the strategy straightforward. One expects, therefore, that either there will not be two Center parties at all (fusion), or that the two Center parties will negotiate which of them puts up a candidate in each district (nomination agreements), or that voters will supply the defect of elite coordination and vote strategically.

The second case is similar. The point here is that a Left coalition of, say, five parties may fail to secure one of the runoff spots if they all run and the Right runs two evenly-matched candidates. So lopsided bipolar multipartism, similarly to divided Centers, ought to end in fusion, nomination agreements, or strategic voting.[9]

Finally, I should note that the focus of concern here has been the number of parties that will compete under majority runoff rules. A related issue is the *kind* of party that will prosper (i.e., win seats). Here the conventional wisdom, clearly articulated by Sartori (1994), is that anti-system and extremist parties will be disadvantaged by runoff rules, since they will typically be poorly positioned in the bargaining that goes on between first and second rounds.[10] The point here is reminiscent of one frequently made in the literature on coalition governments, whereby centrally located parties have an advantage, at least when parties are to some extent policy-motivated (cf. Laver and Schofield 1990).

[9] Something of the incentives that runoff elections provide for fusion, in the top-two case, can be seen in the Russian presidential race of 1996. By April and May of 1996, the situation seemed to be one in which Yeltsin and Zyuganov would be the only two to make the runoff. This led to some talk about a "third force" primary that would involve three of the major players left out in the cold by the anticipated result. If they could arrange a primary, with the winner taking the sum of the third-force votes, then *ex ante* they could transform a situation in which each had no chance of making the runoff into one in which each had some positive probability of doing so. Yeltsin's American advisers, consistent with their overall strategy of making Yeltsin the focal alternative to Zyuganov, advocated disrupting the attempt at third force unity (Kramer 1996:36).

[10] Evidence that this is indeed the case is provided by Fisichella (1984); Blais and Carty (1989).