The Two-Party System and Duverger’s Law:
An Essay on the History of Political Science

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One defining characteristic of science as distinct from belles lettres, criticism, and philosophic speculation is the accumulation of knowledge in the form of more or less verifiable propositions about the natural world. In the conventional view of science, propositions are verified deductively when they are inferred indisputably from an axiom system and verified empirically when they have survived repeated attempts at falsification (Popper 1963). In practice, however, scientific propositions are typically neither so theoretically indisputable nor so empirically unfalsifiable as the conventional view suggests. Rather, most reported tests of propositions involve either discrediting a theory or successful falsification. The triumphant scientist then replaces the proposition he or she has falsified with a revised one, which passes the test that the initial proposition failed. When I speak of a more or less verified proposition, therefore, I mean the one that is the current end point of a series of revisions and that is, at least provisionally, accepted by the relevant portion of the scientific community (Riker 1977). By the phrase “accumulation of knowledge” we mean not only that the corpus of propositions is growing but also that each one of the series of revisions is more general or more precise than its predecessor.

In this view, every branch of science has a history which is a chronicle of the marginal revisions of propositions leading up to the currently accepted ones. This is what Thomas Kuhn (1970) calls “normal science.” Political science, which is my concern in this essay, has, however, often been said to have no history, which is of course merely a way of saying that it contains no accumulation of knowledge and that it is therefore not a branch of science. Many political scientists have been persuaded to believe this assertion, so that in despair they are inclined to abandon the search for scientific generaliza-

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tions. (This despair is, I believe, the root of the movement toward phenomenology and hermeneutics and other efforts to turn political science into a belles-letttristic study.)

The rationale for the assertion that political science lacks a history is that political institutions, the main topic of generalizations in the field, are themselves so evanescent that the subject and predicate classes of scientific propositions change more swiftly than the propositions can be perfected. It is indeed true that in comparison with the physical and biological sciences, which deal with the unchanging properties of matter, and even in comparison with psychological sciences, which deal with the relatively more plastic properties of the human psyche, the habits and institutions studied in the social sciences are swiftly changing. But generalizations are neither so hard to come by nor so hard to perfect as this criticism implies. Many of the propositions of social science involve an interplay between permanent psychological characteristics of humans and institutional structures. This feature implies some degree of permanence for the subject and predicate classes of generalizations in social science. For example, the law of demand in economics—that, with appropriate qualifications, demand curves do not slope upward—is mainly psychological in character and is indeed a better formulated and more thoroughly verified law of behavior than any to be found in the science of psychology itself. Even when the psychological component is smaller and the institutional component is larger than in the law of demand, as is typical in political science, lasting generalization is still possible because many institutions (e.g., voting and decisions by forming coalitions) are, when abstractly described, at least as old as written history.

It should be the case, therefore, that political science, like any other science, has a history, even if it has not heretofore been chronicled. My intention in this essay is to demonstrate that a history does exist, and my vehicle is a particular series of reformulations called Duverger’s law. I am not undertaking this demonstration out of chauvinism, merely to claim for students of politics the name and privilege of scientists, but rather to show that the accumulation of knowledge is possible even when dealing with such fragile and transitory phenomena as political institutions (Riker 1977). This is also why I deal with Duverger’s law, a not very well accepted proposition dealing with institutions of only the last two hundred years. If it is demonstrated that knowledge has accumulated, even in this not yet satisfactorily formulated “law” about an ephemeral institution, then I will have demonstrated at least the possibility of the accumulation of knowledge about politics.

I.

Duverger’s law proposes that “the simple-majority single-ballot system favors the two-party system.” Duverger described this sentence by saying: “Of all
the hypotheses... in this book, this approaches most nearly perhaps to a true sociological law" (Duverger 1963, p. 217). Related to this sentence is another, which Duverger did not elevate to the status of law:  "the simple-majority system with second ballot and proportional representation favors multi-partyism" (Duverger 1963, p. 239). I will refer to the first proposition as the law and to the second proposition as the hypothesis. These propositions distinguish among three kinds of electoral systems, which, although far from a complete list of the systems in current use, are the only ones used widely enough to admit the observation of their relationship with the number of political parties:

1. **Plurality voting**—rather misleadingly called the simple-majority, single-ballot system by Duverger—in which the unique winner is the candidate with the most votes. With two or fewer candidates, the winner has a simple majority of the votes cast; with three or more candidates, the winner may have only a plurality.

2. **Run off majority voting** among three or more candidates with two ballots, in which at the first ballot the winners are the two candidates with the largest and second largest number of votes, and, at the second ballot between exactly these two, the winner is the candidate with a simple majority. Coupled with the two-ballot system are various alternative vote methods in which counting, rather than voting, occurs twice, using the same definition of winning as in the two-ballot system.

3. **Proportional representation**, in which the winners are those candidates who obtain some quota of votes, usually \( v/(s + 1) \) or \( (v/(s + 1)) + 1 \), where \( v \) is the number of votes cast and \( s \) is the number of winners to be selected. Since \( s > 1 \), some winners must have less than a plurality.

Although it is easy to clarify Duverger’s terminology, it is not at all easy to straighten out the ambiguity in his statement of the relationship between electoral systems and the number of parties. Is plurality voting a necessary condition of the two-party system? or a sufficient condition? or both? or neither? The claim that the relation is “a sociological law” suggests causality or a necessary and sufficient condition, whereas the use of “favors” suggests the relationship is at best probabilistic, not deterministic. I suspect the formulation was deliberately ambiguous because the author was not himself entirely certain of what he wanted to claim. Just what the claim ought to be is not immediately obvious, so I will settle the question as I survey the present state of knowledge about Duverger’s law.

II.

Duverger’s sentences appeared in print in 1951, but as is usually the case with scientific laws, similar propositions had already been widely discussed and
reformulated with some increasing degree of sophistication. Indeed, related propositions appeared in popular discussion almost as soon as methods other than plurality voting were proposed or adopted for legislative elections in which large numbers of people were expected to vote. Such electorates were constituted in America in the eighteenth century and in Western Europe in the late nineteenth century. Once these large electorates existed, there also existed a motive for politicians to attempt to devise appropriate methods to manipulate outcomes in elections, and hence methods other than plurality voting were discussed and adopted. Naturally proponents and opponents of alternative methods also thought deeply about the consequences of alternative methods and thus began to discuss propositions related to Duverger’s law.

These propositions were to be expected, and it is quite likely that there is indeed some demonstrable relation between electoral forms and the structure of the party system. Whatever their other ideological or programmatic functions, political parties serve to organize elections. (For a recent elaboration, see Katz 1980.) Politicians and candidates with some common interests—perhaps only a common desire to win or perhaps also a common ideology or a common identification with a group—appeal to voters under a common banner, and thereby generate political parties. Since one motive for the common appeal is the desire to win, it is not surprising that the constitutional definitions of winning have an effect on the parties thereby generated. If winning is defined as the most votes, that is, as a plurality, then one might reasonably expect a two-party system owing to the necessity under this definition of maximizing votes. Since the best way, in the long run, to get the most votes is to get more than half, each of two parties might be expected to structure a coalition in the hope, before the election, of getting a majority. Alternatively, if winning is defined as more than half the votes at a runoff election, candidates do not necessarily have to maximize votes at the initial election—the second most votes initially may be enough to win in the end. And if winning is defined as the achievement of some number of votes less than half (as is necessarily the case under proportional representation), then the necessity of maximizing disappears entirely. In short, when the definition of winning forces candidates to maximize votes in order to win (as in plurality systems), they have strong motives to create a two-party system; but when the definition of winning does not require them to maximize votes (as in runoff and proportional systems), then this motive for two parties is absent.

The twin conditions of a large electorate and proposals for methods other than plurality voting were met in Europe in the latter half of the nineteenth

1. It is customary to call the law by Duverger’s name, not because he had much to do with developing it but rather because he was the first to dare to claim it was a law. The memorial honors, therefore, a trait of character as much as a scientific breakthrough.
century, but general public discussion on the subject did not appear until the 1850s. In 1859, Thomas Hare in *The Election of Representatives* set forth an elaborate method of proportional representation, the single transferable vote, and in 1861, John Stuart Mill popularized it in *Considerations on Representative Government*, which contained a philosophical justification of Hare's method. Mill believed Parliament should contain "not just the two great parties alone," but representatives of "every minority . . . consisting of a sufficiently large number," which number he defined precisely as the number of voters divided by the number of seats (Mill 1910, p. 263). He expected the proposed system would produce Tory free traders and Tory corn law supporters without upsetting the two-party system.

Quite recently Duff Spafford sent me what he and I believe is the earliest known explicit statement of the law. Henry Droop, an English barrister, advocate of proportional representation and inventor of the Droop quota, wrote in 1869 about plurality voting:

> Each elector has practically only a choice between two candidates or sets of candidates. As success depends upon obtaining a majority of the aggregate votes of all the electors, an election is usually reduced to a contest between the two most popular candidates or sets of candidates. Even if other candidates go to the poll, the electors usually find out that their votes will be thrown away, unless given in favour of one or other of the parties between whom the election really lies.

By 1881 he was prepared to argue "these phenomena [i.e., two-party systems] I cannot explain by any theory of a natural division between opposing tendencies of thought, and the only explanation which seems to me to account for them is that the two opposing parties into which we find politicians divided in each of these countries [United Kingdom, United States, etc.] have been formed and are kept together by majority voting" [emphasis added; Droop means, of course, plurality voting].

This is the earliest explicit statement of Duverger's law that I have seen. By 1901 it was a commonplace.

III.

In the previous section I reported a gradual development culminating in a clear and unambiguous statement of both Duverger's propositions twenty years after Hare and seventy years before Duverger. In the succeeding half-century, scholarly support became quite general, so that it was indeed reasonable for Duverger to call one of them a law. The general theme of this development is that of an initial skepticism followed by increasing acquiescence.
A. Lawrence Lowell, whose books on comparative politics dominated the field at the turn of the century, thought that the two-party system was essential for effective parliamentary government. He attributed this system in Great Britain to the historical experience of the English people, but he also thought that the absence of it in France was owing to the majority system and the second ballot (Lowell 1896). Thus, in effect, he accepted Duverger’s hypothesis but not Duverger’s law. Other prominent scholars of that period were less clear. Ostrogorski, for example, was so eager to do away with political parties by his own pet reforms that he never quite diagnosed the causes of structural features of parties (Ostrogorski 1908, vol. 2, p. 705). Practical publicists, excited by the controversy over proportional representation, which was considered or adopted in most European countries between 1900 and 1925, tended to favor proportional representation if they belonged to parties without a majority and to oppose it if they belonged to parties with the majority or close to it. Implicitly, therefore, they behaved as if they agreed with Duverger’s law. One author who explicitly stated this belief was J. Ramsay MacDonald, later a Labour prime minister, who wrote frequently against proportional representation and clearly explained the forces involved in Duverger’s law (MacDonald 1909, p. 137). On the other hand, most minority publicists were not so frank; when they favored proportional representation, they typically denied Duverger’s hypothesis (on the effect of proportional representation) and pointed out that countries without proportional representation often did not have two-party systems. Conversely, those opposed to proportional representation were not quite sure.

Two strands of intellectual development removed the doubts. One was the spread of dissatisfaction in the 1930s with proportional representation; the other was an increased scholarly examination of the origins of the two-party system that characterized the successful American polity. Since the dissatisfaction with proportional representation relates to Duverger’s hypothesis (that proportional representation caused multiple parties, the lesser of Duverger’s two propositions), I will skip over most of that debate, which was especially aimed at identifying the reasons for the initial successes of the German National Socialist Party. An excellent example of the effect of that experience is observable in the two editions of a Fabian Society tract by Herman Finer, a prominent student of comparative politics. In the initial edition (1924), he criticized proportional representation in much the same way as had MacDonald fifteen years earlier, that is, as a system that confused responsibility. In the second edition (1935), however, he added a postscript in which he blamed proportional representation in Italy and Germany for increasing the number of political parties. Then he attributed the weakness of executives and the instability of governments to the multiplicity of parties, and he explained the rise of Mussolini and Hitler as a reaction: “people
become so distracted by fumbling governments, that they will acquiesce in any sort of dictatorship” (Finer 1935, p. 16). Hermens's *Democracy or Anarchy: A Study of Proportional Representation* (1941) constitutes the most elaborate indictment of this electoral system for its encouragement of National Socialism, and although not published until 1941, its evidence had been widely circulated for several years before that. Finer and Hermens were frequently quoted, and the collection of evidence on this subject by Hermens and others (e.g., Mellen 1943) had, I believe, a significant persuasive effect in support of Duverger's hypothesis.

The scholarly study of the two-party system tended to increase the evidence for and scholarly certainty about Duverger's law. Arthur Holcombe, a prominent American political scientist in the first half of the century, affirmed Duverger's law as early as 1910 (Holcombe 1910). Although in a popular textbook published as late as 1919 W. B. Munro attributed the two-party system to the "practical capacity of the Anglo-Saxon race" (Munro 1919, p. 329), and although authors of other popular textbooks of the next decade, e.g., Charles Merriam, E. M. Sait, and Frederic Ogg, avoided the subject entirely, by 1933 the notion was well established that plurality voting for executives generated the American two-party system. This example of presidential and gubernatorial elections proved extraordinarily convincing, and within a decade the more general form of Duverger's law was enshrined in popular American textbooks. Thus Carl Friedrich observed that the "single member district with plurality elections . . . forces the electorate to make up its mind between two clear-cut alternatives" (Friedrich 1937, p. 290), and E. E. Schattschneider wrote that the "single-member-district-system-plus-plurality-elections . . . discriminates moderately [emphasis in original] against the second party, but against the third, fourth, and fifth parties the force of this tendency is multiplied to the point of extinguishing their chances of winning seats altogether," a force that thereby guarantees exactly two parties (Schattschneider 1942, p. 75). V. O. Key, Jr. (1949) even applied the idea of the law to the superficially one-party system of the states of the old Confederacy, observing that where primary elections in the one main party were conducted with the plurality rule, there was bifactionalism, and where conducted with the runoff majority rule, there was multifactionalism.

Scholarly acceptance of both Duverger's law and Duverger's hypothesis was therefore quite general by the time he formulated them. Duverger's own contribution was twofold: First, he distinguished sharply between the law and the hypothesis, which previously had often been mistakenly interpreted as duals of each other. (Since plurality and proportional systems are only two out of many, the absence of one does imply the presence of the other.) Second, he collected and systematically arranged a large amount of historical evidence in support of both sentences so that their full significance was apparent.
Of course, acceptance and utterance do not make statements true. The history of these sentences in the next thirty years consists mainly in collecting evidence for and against their truth and revising their formulation and adjusting the rational-choice model within which they fit. Since it is just exactly this activity that constitutes the daily life of science, the fact of a substantial amount of testing out and reformulating of Duverger's hypothesis and law is evidence of the accumulation of knowledge I am trying to describe.

I start with Duverger's hypothesis (that proportional representation and majority systems favor multiparty systems). Clearly Duverger himself was uneasy about the hypothesis, did not call it a law, and asserted it only as a probabilistic association, not a deterministic one.

The rational-choice theory, standing implicitly behind the hypothesis, is that proportional representation and the second-ballot runoff both offer politicians an incentive for the formation of new parties and do not give them any disincentive. The incentive is that, given particular configurations of potential coalitions, these systems sometimes permit new parties (and heretofore-excluded politicians) to get a bit of political influence with relatively few votes. That is, in these systems a new party does not have to get the most votes to win, merely some indefinite number less than the most. Under proportional representation, the candidate or list with the second most votes can always win seats and sometimes can win candidates with the third or fourth most votes. Indeed, the purpose of the system is to encourage this result. In the runoff majority system a candidate who initially has the second most votes can ultimately win, provided the supporters of eliminated candidates vote for her or him at the second ballot. Hence, if a group of politicians can see a chance to come in second or third, it is often worthwhile to form a new party. In the plurality system, on the other hand, this positive incentive is turned into a disincentive because it is rare for the prospective builders of a new party to see a chance to come in first past the post. This system, then, constitutes a real disincentive because the leaders of the new party are likely to be regarded as politically irrelevant. This disincentive is absent from proportional representation and runoff systems, however, because even leaders of failed parties are welcome in expanded coalitions of continuing parties. Neither feature of this incentive system is strong enough to permit one to say for certain that these electoral systems favor multiple parties. The incentive is weak because it operates only when people want to form new parties for other reasons. However, there are surely many configurations of potential coalitions, configurations lasting through many elections, that do not render it likely that new parties will come in second (probably the case in Austria) or even third (probably the case in Ireland). Similarly the absence of a disi-
centive for new parties within the system of proportional representation itself is not very important. Although the existence of proportional representation prohibits the direct use of the disincentive inherent in plurality voting, there are other kinds of efficacious disincentives that can be combined with proportional representation, as has been done in Germany and perhaps Austria. So the incentive is not sufficient and the disincentive is not necessary. Hence the hypothesis cannot be deterministically valid, although doubtless there is a fairly strong probabilistic association between proportional representation or runoff elections on one hand and the multiparty system on the other.

V.

We can therefore abandon Duverger’s hypothesis in its deterministic form (although it is still useful for practical life) and proceed to the more interesting question of Duverger’s law, relating plurality elections and two-party systems. The difficulties with the law are less formidable. There are indeed counterexamples, but not, I believe, definitive ones, so that the law may possibly survive with appropriate revisions. If we can also fit it to an adequate theory, it may even be persuasive.

The two most pressing counterexamples to Duverger’s law are in Canada and India, where despite plurality elections there are distinctly more than two parties. In Rae’s study of 121 elections in 20 countries, 30 elections were conducted under plurality rules and seven of these—all in Canada—resulted in more than 10 percent of the votes for a third party. Rae attributed the Canadian deviation to the fact that, geographically, local parties survive as the main parties in some provinces while they are third parties nationally. Doubtless this situation derives from the extreme decentralization of Canadian government, wherein the chance of provincial control is of itself enough to motivate political action.

On the basis of the Canadian exception, Rae reformulated Duverger’s law from “the simple-majority, single-ballot system favors the two-party system” to “plurality formulae are always associated with two-party competition except where strong local minority parties exist” (Rae 1971, p. 95).

The Indian counterexample is more difficult to deal with. India began plurality elections about the same time Duverger formulated his law, and only once has something approaching a two-party election been held.

On another occasion (Riker 1976), I have offered the explanation that because Congress, the largest party in India, includes the median of the voters arranged on an ideological spectrum, Congress has most of the time been the second choice of many voters on both its right and its left. Hence, the party has probably been a Condorcet winner most of the time, although it has never
obtained an absolute majority.\(^2\) Congress has been clearly defeated only when the opposition has been so consumed with intense popular hatred of Mrs. Gandhi or with intense elite lust for ministerial office that politicians and voters alike could put aside their ideological tastes and act as if they ordered their preferences with Congress at the bottom of the list. When they have done so, they have defeated Congress in both state and national elections. Then, typically, coalitions of each end against the middle (like Janata in 1977–79) have dissolved and Congress has won again, presumably as the Condorcet choice. With these thoughts in mind, I constructed a model in which, with rational participants who wished to maximize political satisfaction, i.e., for office and ideological tastes, a multiparty equilibrium was consistent with plurality elections. The essence of this model was that some party in the multiparty system was regularly a Condorcet winner. Utilizing this feature, it is possible to revise Duverger’s law further, incorporating Rae’s revision, to account for both of the apparent exceptions, Canada and India.

In my revision the law reads:

Plurality election rules bring about and maintain two-party competition except in countries where (1) third parties nationally are continually one of two parties locally, and (2) one party among several is almost always the Condorcet winner in elections.

Note that this formulation is deterministic—an attempt to avoid the ambiguity of Duverger and Rae. The law asserts that, with the exceptions noted, the plurality rule is a sufficient condition for a two-party system. It is not, however, an assertion of a causal relation, inasmuch as the plurality rule clearly is not a necessary condition (vide, Austria).

VI.

The revised law is entirely consistent with our knowledge of the empirical world, accounting both for the long history of two-party competition in Anglo-American countries with plurality voting and for the apparent exceptions like Social Credit in Canada, the Irish in Britain in the nineteenth century, the multiparty grouping around Congress in India, and the few third parties in the United States that have survived more than one election. But the law itself is entirely empirical, the record of observations. It explains nothing and tells us nothing about why it works. It is the task of science to explain the law by incorporating it as a necessary inference inside a theory. Thus it is appropriate to look at the theory that subsumes the law.

Duverger offered two theoretical explanations for why the plurality rule

\(^{2}\) A Condorcet winner is a candidate who can beat any other in a pairwise contest.
discovers third parties: (1) a "mechanical effect" of underrepresenting losing parties; and (2) a "psychological factor" in that voters do not want to waste their votes on losers. Both these reasons derive (implicitly) from a view of both politicians and voters as rational actors, i.e., expected utility maximizers. The mechanical effect gives politicians an incentive to abandon parties that win even less than they might be expected to; the psychological factor gives voters, observing wasted votes and even votes that, being wasted, indirectly contribute to the victory of least-liked parties, an incentive to vote for their second choices. If both these propositions are correct, they can be combined, as they were by Duverger, into a theoretical explanation of the operation of the law.

The existence of the mechanical effect was disputed by Grumm on the basis of a modest bit of evidence (Grumm 1958). But Rae showed definitively by an empirical comparison that plurality rules gave a greater relative advantage to large parties over small ones than did proportional representation rules (Rae 1971, pp. 88–92). Sprague (1980) carried Rae’s analysis quite a bit further by calculating precisely how much plurality systems are biased against third parties.

The main dispute is about the validity of the psychological factor, which Downs bluntly described thus:

A rational voter first decides what party he believes will benefit him most; then he tries to estimate whether this party has any chance of winning. He does this because his vote should be expended as part of a selection process, not as an expression of preference. Hence even if he prefers party A, he is "wasting" his vote on A if it has no chance of winning, because very few other voters prefer it to B or C. The relevant choice in this case is between B and C. Since a vote for A is not useful in the actual process of selection, casting it is irrational. (Downs 1957, p. 48)

What Downs describes has come to be called "sophisticated" voting, by which is meant that the voter takes account of anticipated votes by others and then votes so as to bring about the best realizable outcome for himself, regardless of whether or not his vote is sincere, i.e., for his preferred alternative.

In the election of single executives, if sophisticated voting occurs, it always works against third parties. (Indeed, early statements of Duverger’s law in the United States, e.g., by MacMahon [1933], emphasized the special importance of the elected executive in bringing the psychological factor into play.) In the election of members of a legislature, however, which of the several parties is weakened by sophisticated voting depends on conditions in the constituency. If the third party nationally is the weakest locally, then
sophisticated voting by its supporters weakens it. However, if the third party nationally is one of the two larger parties locally, then sophisticated voting by supporters of the weakest party (i.e., one of the two larger parties nationally) strengthens the third party. This latter effect is probably what has kept alive the Liberal party in Britain and some Canadian third parties. Because third parties remain third parties, however, the main force of sophisticated voting must work against third parties.

Given the significance of sophisticated voting in the explanation of why Duverger’s law works, one very important question is: Does sophisticated voting occur? That is, are ordinary voters clever and bold enough to vote against their true tastes?

Shively (1970) made the first attempt to discover sophisticated voting. He interpreted Duverger’s law (rather too broadly, I think) as the sentence: “Where the likelihood that a party can win... is low, voters are less likely to continue voting for it, or... to begin voting for it.” For a test, he created an index of the likelihood of winning and regressed the change of a party’s proportion of the vote in two consecutive elections on this index. He expected a positive association, i.e., low likelihood linked with decline in share of votes, but he got a negative one. This result led him to further statistical manipulation and a reinterpretation which he believed supported the law, though only weakly. Hence he concluded that the psychological factor had “a trivial impact on election outcomes.”

Given the empirical strength of Duverger’s law at the institutional level, these results from electoral data were, to say the least, perplexing. Since Shively’s form of the hypothesis and his method were far too gross to study the truly relevant behavior, however, other scientists have looked more precisely at voters’ desertion from third parties. These investigators have found a relatively large amount of sophisticated voting in Britain, Canada, Germany, and the United States, as described in Spafford (1972); Lemieux (1977); Cain (1978); Fisher (1974); Black (1978, 1980); and Bensel and Sanders (1979).

VII.

The evidence renders it undeniable that a large amount of sophisticated voting occurs—mostly to the disadvantage of the third parties nationally—so that the force of Duverger’s psychological factor must be considerable. It seems initially appropriate and attractive, therefore, to construct a theory to explain Duverger’s law out of the theory of rational choice. Nevertheless, we cannot do so blithely. In the first place, not everyone votes sophisticatedly, although the evidence collected here suggests that most people who “should” do so by reason of the expected utility calculus probably do so in fact. It is difficult, however, to build a theory on behavior that is not certainly universal, and even
if it is universal, there remains a serious and unresolved paradox in the argument, which is that the expected utility calculus of voting may itself be irrational.

In Downs's statement of the theory, which I cited previously, the rational voter should expend his vote "as part of the selection process," not as "an expression of preference." Yet this statement may be indefensible because, as Downs himself pointed out (1957, pp. 36–50, 260–76) and as Ordeshook and I have elaborated (Riker and Ordeshook 1968), it may be impossible for an individual to influence the selection process. One interpretation of influence is the chance to make a tie or to break a tie that occurs in the absence of the individual's vote. This chance is, of course, extremely tiny in most elections in the modern state. Under this definition, it is objectively the case that one cannot expect to contribute much to the decision process. If so, the rational action may be simply to express a preference.

Ferejohn and Fiorina (1974, 1975) have suggested that individuals do not calculate their chance of influence but merely their satisfaction, minimizing thereby the maximum regret they would feel if an undesired candidate won. The debate over the relative merits of minimax regret and expected utility is extensive (Beck 1975; Mayer and Good 1975). Although the bulk of the evidence about the way people behave now seems to favor expected utility (Black 1978; Cain 1978; Aldrich 1976), still the fact that the minimax regret interpretation can be put forward plausibly suggests that some people may be interested merely in utility, not expected utility.

The direction one must go, I believe, is to turn attention away from the expected utility calculus of the individual voter and to the expected utility calculus of the politician and other more substantial participants in the system. The groups and individuals who buy access and the politicians who buy a future have substantial interests, and it is their actions to maximize expected utility that have the effect of maintaining the two-party system under plurality voting.

One especially interesting feature of politics under plurality rules is that minority parties regularly appear. The reason, I believe, is that quite reasonably not all voters vote sophisticatedly. Instead they are willing to support a program that appeals to their ideological taste. Potential politicians are in turn often willing to experiment with and invest in new programs and platforms to form a possible winning venture. Since some of these win locally, they can remain in the system for a long time. In the United States there is the additional attraction to politicians in that we have a two-ballot majority system (rather than a plurality system) at the electoral college level, which encourages third parties because their leaders may convince themselves that they have a chance to throw the election into the House of Representatives (Bensel and Sanders 1979). Coupling the interest of potential leaders with the sincere
behavior of many voters, one understands why there is an almost constant supply of third parties.

The interesting question about such parties is not why they begin but why they fail. I believe the answer is that donors and leaders disappear. A donor buys future influence and access, and many donors are willing to buy from any party that has a chance to win. (In the United States, at least, many donors give to both parties.) But as rational purchasers they are not likely to donate to a party with a tiny chance of winning, and in a plurality system, most third parties have only that chance, because plurality rules give large parties a large relative advantage over small parties (Rae 1971, pp. 88–92; Sprague 1980). Similarly a potential leader buys a career, and as a rational purchaser he has no interest in a party that may lose throughout his lifetime. So the answer to the question of failure is that third parties are rejected in the rational calculus of expected utility especially by leaders, though also in the calculus by many simple voters. Any adequate theory to subsume Duverger’s law must, I believe, begin there, which is a task for scholars in the next decade.

VIII.

I began this survey of the history of Duverger’s law to demonstrate that a history existed. I think it is clear that in a forty-year period in which writers struggled to enunciate it, through another half-century, when it was clarified until Duverger asserted it as a law, and in the succeeding thirty years, it has been examined with increasing scientific sophistication:

- empirically: Counterexamples have been analyzed and the law revised to subsume them.
- theoretically: A theory of the behavioral forces involved has been enunciated and revised. From the first enunciation by Droop, the law has been implicitly embedded in a rational-choice theory about the behavior of politicians and voters. This theory has been rendered more and more explicit, especially in the last two decades, so that recent empirical work consciously invokes the rational-choice model.
- and as a source of hypotheses: Propositions inferred from it have been tested as, for example, the inquiry about sophisticated voting was undertaken because, if the law is valid and if the theory is appropriate, something like sophisticated voting must occur.

Of course, there is much yet to be done. If the theory is revised along the lines I have suggested, conditions to cover the counterexamples will doubtless be clarified and simplified. And there are more politics to examine. Recently Nigeria has adopted plurality voting, and its future experience with or without a two-party system will be another test of the law.
Although we are only part way along in this history, it still seems to me that the law is much more defensible than when Droop uttered it a century ago. Many—perhaps most—political scientists who specialize in the study of political parties now accept the law (e.g., Katz 1980, who, however, thought it applied particularly at the local level). Still, not all political scientists are convinced it is valid, and that is exactly as it should be, for skepticism about supposed truths is the heart of science. Still nearly everyone would agree, I believe, that there has been some accumulation of knowledge, and that is what I set out to demonstrate.

REFERENCES


