Empirical social choice: An introduction

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Abstract The year 2012 was the 30th anniversary of William H. Riker's modern classic *Liberalism against populism* (1982) and is marked by the present special issue. In this introduction, we seek to identify some core elements and evaluate the current status of the Rikerian research program and its empirical applications. Special attention is given to three phenomena and their possible empirical manifestations: The instability of social choice in the form of (1) the possibility of majority cycles, (2) the non-robustness of social choices given alternative voting methods, and (3) the possibility of various forms of manipulation of the decisions (heresthetics). These topics are then connected to the contributions to the current special issue.

Keywords: Social choice; Condorcet's Paradox; voting theory; voting paradoxes; preferences; heresthetics.

> *[Even] if an omniscient observer, call him Zeus, knew the true tastes of every voter, it would still be impossible for him to predict the social choice or the product of aggregating preferences unless he also knew the method of aggregation. This means that the social choice depends not simply on the wills of individuals, but also on the method used to summarize these wills.*

> William H. Riker (1982: 31)

1. Introduction

In 2012, it was 30 years since the publication of the modern classic, *Liberalism against populism: A confrontation between the theory of democracy and the theory of social choice*, by the US political scientist William H. Riker (1920-1993). The book has since provided more than a generation of political scientists and economists with an introduction to the concepts and results of social choice theory—and, perhaps most importantly, a systematic confrontation of the former with empirical case studies; it also drew considerable

reactions, both favorable and unfavorable.[1] The year 2012, however, was also the anniversary (the 50th) of another of Riker's books, the even more influential *A theory of political coalitions*, one of the first applications of game theory to political processes (Riker 1962). Both works became very widely cited[2] and contributed to making Riker one of the most influential political scientists of the 20th and early 21st centuries.[3]

In these and other works, Riker brought rationality and game theory to political science, and to some extent also political science and institutions to public choice; indeed he was "the only well-known political scientist among the founders of rational choice" (Mitchell 1999: 238).[4] Riker was a founding member (1964) and early

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[1] Two distinguished students of Riker's view *Liberalism against populism* as his most seminal work (Bueno de Mesquita and Shepsle 2001). Looking at the number of citations relative to the age of the publication, the book certainly is the most influential single work by Riker, cf. Maske and Durden (2003: 193ff).

[2] In 2013 Google Scholar counted *Liberalism against populism* as having been cited almost 2,300 times (ca. 750 times going by the Social Science Citation Index). His seminal article in *American Political Science Review* on disequilibrium in majority decision-making (Riker 1980) was in many ways a precursor to the 1982 book and had in 2013 been cited almost 900 times (ca. 300 citations in SSCI). Riker's direct follow-up to the book, the less technical and more popular *The art of political manipulation* (Riker 1986), had been cited ca. 1,250 times. Together the citations of two of these three matches Riker's most cited work, *A theory of political coalitions* (ca. 3,150 citations). For an earlier citation analysis of Riker's works (using only SSCI data), see Maske and Durden (2003).

[3] Shortly after his death the editors of the pluralistic, multidisciplinary *New Handbook of Political Science* (Goodin and Klingemann 1996) estimated that across all the sub-disciplines of political science Riker shared a third place in terms of citations, along with Gabriel Almond and Robert Dahl. Quite remarkably Riker's own student, Kenneth Shepsle, beat him, sharing second place with Seymour Martin Lipset, with Sidney Verba in first place. Riker was also judged to be one of a small group of "highly visible integrators" making an impact across a wide set of sub-disciplines within political science. (See Goodin and Klingemann 1996: 31, 34 and 41).

[4] On the life and academic contributions of Riker more broadly, see, e.g., Mitchell (1994); Bueno de Mesquita and Shepsle (2001); McLean (2002); Aldrich (2004); McLean (2008).

president of the Public Choice Society (1966-1967), and, indeed, the first political scientist to hold that position. He subsequently served on the editorial board of this journal for years and contributed a number of articles to it, including "The place of political science in public choice" (Riker 1988) and the for present purposes very relevant article "Plurality and runoff systems and number of candidates" (Wright and Riker 1989).

Together these facts make a fitting opportunity to publish a special issue devoted to Rikerian perspectives on social choice—first and foremost the issue of how to apply the frequently extremely abstract concepts of social choice theory to situations of real, day-to-day working political decision-making. In order to do so the present article will, first, identify and recapitulate some of the most important insights of potential importance for democracy coming out of *Liberalism against populism* (section 2), notably with respect to the possibility of "cyclical" majorities, the robustness of social choices relative to alternative voting procedures, and the consequences of various forms of "manipulation" (heresthetics). Subsequently, we introduce the contributions to this special issue in the light of how they relate to the aforementioned topics (section 3). Finally, we will say a few words about what this tells us about the life and possible future directions of the Rikerian program (section 4).

2. Rikerian perspectives on empirical social choice

William H. Riker's works spanned many fields and themes, and his chief success academically was his large part in being responsible for introducing game theory into political science, as "positive political theory" or "formal political theory".[5] However, for the present purposes we will limit the focus to his work on social choice

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[5] On Riker's role as the founder of the "Rochester School" or "positive political theory", see Mitchell (1988) and Amadae and Bueno de Mesquita (1999).

analysis and, more narrowly, to three questions or themes emanating from *Liberalism against populism* and central to both Riker's legacy and the analysis of how democracy works in those situations wherein three or more decision-makers are to choose between three or more alternatives. Riker summarized what he felt were the central insights:

> [I have shown] that no method of voting could be said to amalgamate individual judgments truly and fairly because every method violates some reasonable canon of fairness and accuracy. All voting methods are therefore in some sense morally imperfect. Furthermore, these imperfect methods can produce different outcomes from the same profile of individual judgments. Hence it follows that sometimes—and usually we never know for sure just when—the social choice is as much an artifact of morally imperfect methods as it is of what people truly want. (Riker 1982: 115)

From this perspective, and the book in general, three separate analytical issues or possibilities emerge:

1. **Cyclical majorities**: The possibility that there may be no alternative that cannot be beaten by at least one other alternative in pairwise comparisons.
2. **Robustness**: The possibility that the outcome of a decision process may depend not simply on the preference profiles of the decision makers, but also on the procedure/method chosen to aggregate those preferences into a collective choice.
3. **Heresthetics**: The possibility that one or more decision-makers can determine or manipulate the context, structure or procedure of a decision to such an extent that it changes the probability of the outcome.

In the following we will consider these in greater detail.

2.1. *Cyclical majorities*

The perhaps most important problem, or at least the starting point that occupied Riker, was the so-called Condorcet Paradox: The possibility of "cyclical" preferences in collective decisions, whereby *A* beats *B*, and *B* beats *C*, while *C* beats *A*, and there accordingly is no stable equilibrium generated by the preferences alone. The notion of cycles has been known since at least the French mathematicians Condorcet and Borda, but the insight may even be older (cf. McLean and Hewitt 1994; McLean and Urken 1995). In modern social science the possibility of a cyclical majority was made famous by a small group of economists: Kenneth Arrow in his *Social Choice and Individual Values* and more indirectly by the seminal works of Duncan Black, Anthony Downs and James Buchanan and Gordon Tullock (Black 1948; Arrow [1951] 1963; Downs 1957; Buchanan and Tullock [1962] 2004). However, it was Riker who introduced the concept to political scientists (Riker 1958) and subsequently spent many years studying the theoretical and empirical implications of the paradox, with *Liberalism against populism* summarizing his position (up to that point).

But how often are preferences in a group cyclical such that majority rule is indecisive? The first of many analyses—on which Riker built—were occupied with the theoretical possibility and argued that mathematically speaking, and with everything else being equal, the probability of cycles occurring in the preferences of decision-makers (voters, politicians, and so on) could be expected to increase with the number of alternatives and/or the number of decision-makers (e.g., Campbell and Tullock 1965; Garman and Kamien 1968; Niemi and Weisberg 1968; DeMeyer and Plott 1970; Jamison 1975; Gehrlein and Fishburn 1976; Dobra and Tullock 1981). Calculations and simulations demonstrated that with assumptions of strict preferences and of "impartial culture" the probability of a cycle in a group's preferences—with every preference ordering being equal likely—would soon approach 1. This was, to a large extent, the point argued in *Liberalism against populism*: Cycles in

reality are almost universal—but often we do not see them, until we look for them, and when we do they may be hard to detect because we lack reliable information about individuals' preference orderings over the relevant alternatives.

More recent research has questioned this view, by arguing that even relatively small changes in the assumptions—e.g., allowing for indifference between alternatives and with preference homogeneity among groups of voters—may significantly affect these calculations. In fact, the probability of cycles may fall and become rather rare (Jones et al. 1995; Timpone and Taber 1998; cf. Regenwetter et al. 2006).

But these are all mostly theoretical inquiries. Riker's focus in *Liberalism against populism* (1982), as well as again in *The art of political manipulation* (1986) and other works, was to a large extent to present detailed case studies of actual examples of cycles (and other social choice phenomena) and their possible consequences. This line of research had been spearheaded by Riker himself quite early; in fact, he identified the first two real-world examples of the Condorcet Paradox (Riker 1958; Riker 1965). In order to illustrate this type of analysis, let us consider a recent case identified by Warren D. Smith, who analyzed apparent voter preferences and the outcome of the presidential election of Romania 2009,[6] cf. Table 1.

Insert Table 1 here

The Romanian presidential elections follow a plurality runoff model, whereby the winner is the candidate who in a first round wins an absolute majority of the votes cast or, alternatively, if such a winner does not exist, the two candidates with the most votes go on to a second round, where by definition a simple majority rule winner will emerge. However, since the procedure does not allow for a pairwise comparison of the candidates (which rarely is the case

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[6] See Smith (2009). Smith's analysis has only been published on-line; all of the information presented here is derived from that presentation.

in the real world), or for individual voters to rank all alternatives, a candidate may in practice be elected who actually is not the Condorcet winner, i.e., is not able to beat all other candidates in pairwise comparisons, *and* where this would not be visible to the voters.

Table 1 reports the outcomes of the 2009 election, as summarized by Smith (2009) and the official Romanian authorities. No less than 11 candidates ran in the first round but none obtained a majority; the plurality winner (Basescu) and the runner-up (Geoana) accordingly proceeded to a runoff, where the former very narrowly beat the latter (50.33% to 49.66%).[7]

Election results rarely allow observers to deduce with any certainty whether the Condorcet Paradox is present in an election, but during the campaign a series of polls were taken pitting the leading candidates against each other in pairwise contests. Considering these Smith calculated the head-to-head comparisons of Basescu versus Geoana, Basescu versus Antonescu, Geoana versus Antonescu, Basescu versus Oprescu and Geoana versus Oprescu, taking the sample sizes and levels of statistical significance of the vote shares into consideration. Smith concludes that it is very likely ($p > 0.99$) that one or more cycles were present in the collective preferences of the Romanian voters (with › meaning "… preferred by a majority to …"):

(1) Antonescu › Basescu › Geoana › Antonescu
(2) Obrescu › Basescu › Geoana › Obrescu

Both the official winner of the runoff (Basescu) and the runner-up (Geoana) accordingly were "members" of at least one cyclical majority. In other words, the actual winner (Basescu) was less preferred by a majority of the voters than at least two other candidates (Antonescu and Obrescu), and no matter which one of

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[7] There may have been fraud involved in the election, but for the present purposes these official results have been treated as the correct ones.

four candidates might have won the election, at least one other candidate would have beaten him in a pairwise contest. Smith also estimates that it is very likely that the election had no Condorcet Winner at all ($p > 0.95$), but if there was one it was either Antonescu or Oprescu—both of who received very small vote shares.[8]

In that sense the 2009 Romanian presidential election is a real-world example of the relevance of the type of voting paradoxes Riker encouraged social scientists to investigate. But is it a rare example or is it just rare that we are able to observe it?

2.2. *Robustness*

When it came to the application of social choice theory to democratic decision-making, the second main issue in which Riker can be seen as having been interested in *Liberalism against populism* was how large of an (independent) effect institutions may have on the outcomes. Or, phrased differently, how "robust" the outcomes are relative to the preferences of the decision-makers given changes in voting procedures: "Different choices from identical values", as Riker (1982: 21-40) titled Chapter 2 of *Liberalism against populism*. Given the very large—potentially infinite—number of alternative ways of aggregating preferences, it follows intuitively that different methods and procedures may result in different outcomes, depending on how preferences are distributed among the decision-makers and how different rules may operate on them.

The most elementary illustration of the problem is the procedure of voting on three (or more) alternatives, wherein three (or more) voters find themselves as part of a cycle. If, for example, *A* can beat *B*, and *B* can beat *C* and *C* can beat *A*, then the only features determining what the outcome will be are the number of times votes are taken and the order in which the alternatives are voted on (cf.

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[8] See Smith (2009) for further details, calculations and reservations about the conclusions.

Riker 1982: 138ff). So, whether a decision involves one or more rounds of voting (and how many and in what order the comparisons are made), such as happens in a number of electoral or legislative systems, may conceivably affect the outcome, even if preferences are unchanged and decision-makers behave honestly (i.e., vote strictly in accordance with their preferences). It turns out that there is no guarantee that any method will end in the Condorcet Winner being chosen, if such an alternative exists (cf. Riker 1982: 69-81, 138ff).

If the procedure is not simply one of voting up/down or for one of a pair, but involves ranking or scoring of the alternatives, then the effect may be even clearer. Riker and a number of other scholars have for illustrative purposes produced theoretical preference profiles for which the application of different methods—say, e.g., pairwise comparisons, plurality, Borda count, approval voting, additive and multiplicative "utilitarian" scoring methods, and so forth ad infinitum—all produce different results, in terms of chosen alternatives or ranking of alternatives (Riker 1982: 36ff; Nurmi 1987; Malkevitch 1990; Shepsle and Bonchek 1997).[9]

Such non-robustness of social choice does not even presuppose any intransitivities in the preference orderings or the absence of a Condorcet winner. Almost no matter the number of alternatives and configuration of preferences, it may be theoretically possible to devise agendas or voting methods that will lead to diverging outcomes even when preferences are unchanged (Saari 1994). But how widespread or relevant is this phenomenon in real life? As in the case of the calculation of the probabilities of cyclical majorities, it may very well be that it is a theoretical possibility of little practical relevance. Riker (1982: 29-36) himself retold the instructive real-world example of scientists trying to determine the right spacecraft trajectories by ranking the alternatives (Dyer and Miles 1976). Applying four different (but not excessively so) voting procedures

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[9] See also Kurrild-Klitgaard (2005: 124-38). For presentations of these and other voting methods and their properties when choosing between more than two alternatives, see, e.g., Riker (1982: 66-101); Nurmi (1987).

(including pairwise comparisons) to the rankings resulted in two methods picking one set of trajectories, while two other methods resulted in the choice of another set of trajectories; plurality voting would have resulted in a third outcome. Each method also resulted in different rankings of the sets of trajectories.

The case of the Romanian 2009 presidential election considered above (Table 1) illustrates both the theoretical insights, but also how difficult this type of research is in practice. While data exist showing the results of pairwise comparisons in polls, there is no information available that would allow one to assign cardinal scores to the alternatives or even to determine their ordinal rankings. For that reason, we cannot in this case simulate what the results would have been, had other voting methods been used for aggregating or summarizing the same preferences. However, it is obvious that the vote difference between Basescu and Geoana was so small that some ranking procedure might very well have resulted in the choice of the latter—especially given that the candidates Antonescu, Marko and Becali all endorsed Geoana in the runoff (Smith 2009). Depending on the shapes and intensities of the preferences of the voters, it is not even impossible that Antonescu or Obrescu, or yet other, seemingly unpopular candidates, might have won if one or another method had been adopted. Looking at polling data, Smith has estimated that Oprescu with high probability would have won had so-called approval voting (Brams and Fishburn 1978) been used and that he might have been the winner under some "utilitarian" scoring method. In other words, Basescu, Geoana and Oprescu might each have won using different, uncontroversial voting methods, even if the voters' preferences remained unchanged.

A large number of examples of such non-robustness of social choices have been identified over the years, including, e.g., US presidential primaries and elections (Riker 1982: 22ff; Mueller 2003: 157f; Miller 2011, 2012), elections and government formations in parliamentary democracies (e.g., Riker 1982: 25-28; Härd 2000; Van Deemen and Vergunst 1998; Kurrild-Klitgaard 2008, 2013; Miller 2013), and public spending policies (Kurrild-Klitgaard 2005: 138-46).

This field of research certainly shows no signs of having problems finding illustrative examples of social choice "failures", although it may often be challenging to find the necessary "hard" data (Riker 1982: 29). The real question is what more general inferences and conclusions to draw from this line of research: Does it tell us anything about the conditions (such as procedures, preference profiles and the dimensions of the choice space) under which social choices are not robust?

2.3. *Manipulation*

The third Rikerian point identified here follows almost immediately from the issue of whether or not social choices are robust to changes in the procedures: That political actors may seek to use (and possibly abuse) the rules of the game to produce other results than what otherwise would have been the outcome(s). Such behavior may overall be classified as "manipulation", although it should be stressed that there is not (necessarily) anything illegal or "wrong" about such behavior; the point is simply that the process is being "taken" elsewhere than one would have expected from a mere aggregation of sincere voter preferences. In *Liberalism against populism*, Riker summarized how he saw the implications of that possibility: these are "either that power is concentrated in society or that any system of voting can be manipulated to produce outcomes advantageous to the manipulators or at least different from outcomes in the absence of manipulation"(Riker 1982: 137).

In his important contributions to the literature, Riker came to identify three different forms of "heresthetics"(Riker 1986: 147-52; cf. Riker 1982: 137ff). First and foremost, is the possibility of direct and overt manipulation by those who can use the formalities of a procedure to control a decision-making process (Riker 1982: 138ff, 169-81). To see the point one needs only to consider it as a direct extension of the point about (non-)robustness: If different procedures and/or aggregation methods may lead to different

outcomes, even when individual preference profiles are unchanged, then an actor with an ability to steer the voting process may do so to his own advantage. Riker saw this as a natural extension of the "chaos results" demonstrating that, except in the rare and fragile examples of a pure preference equilibrium, simple majority voting may, when the agenda is appropriately manipulated, lead to any possible outcome (Riker 1982: 237; cf. Plott 1967; McKelvey 1976; Schofield 1978). In such circumstances, it really is the collective choice institution rather than individual preferences that determine outcomes (Shepsle and Weingast 1981; McKelvey and Ordeshook 1984; Shepsle and Weingast 2012). Consider again the case of the 2009 Romanian presidential election: If one particular method of electing presidents is likely to benefit one party at the expense of its competitor(s), then it will be attractive for that party to try to change the rules of the voting system (or their application) to achieve the desired result. Such manipulation may not always be possible: It requires information about the preferences of all decision-makers (voters), as well as the practical ability to change the rules. However, thinking of electoral laws in this perspective may enlighten our understanding of why some countries revise their electoral laws frequently (e.g., Italy since the 1990s) as well as why some countries rarely do so (e.g., Britain and the United States)—with "gerrymandering" of electoral districts being the perhaps most well-known example. In other settings, e.g., parliaments or committees, "agenda control" (as it is frequently referred to) may be much easier, and Riker himself presented case studies of, e.g., that power in the Roman senate and the US Congress (Riker 1982: 173f, 193ff, 1986: 78-88, 129-41).[10] More generally, Charles Plott has in case studies and experiments demonstrated how it is practically possible for an agenda setter to generate almost any outcome

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[10] A very obvious (but far from isolated) example derived from the US Congress was the case of the impeachment of President Clinton, wherein the House leadership simply refused to allow a vote on an alternative they knew would pass (Kurrild-Klitgaard 1999).

(Levine and Plott 1977; Plott and Levine 1978; cf. Riker 1982: 174ff, 1986: 18-33).

Whereas agenda control presupposes privileged positions or at least extensive information and possibly considerable political "capital", there is a second form of heresthetics open to everyone in a voting process: To vote "insincerely" (strategically) relative to what a simple expression of one's sincere preferences would have dictated, namely when one expects that this may increase one's expected utility from the process.[11] Building on the seminal results of Gibbard, Satterthwaite et al. Riker concluded that any (non-dictatorial) voting method may be manipulated by strategic voting, and it does seem likely that strategic voting occurs quite frequently (Riker 1982: 141ff, 167f; cf. Gibbard 1973; Satterthwaite 1975).

Consider again the case of the 2009 Romanian presidential election (Table 1). If the voters who voted for Antonescu in the first round are assumed to have ranked him as their first choice, we can at least hypothesize that Geoana was their second choice; this may be plausible given that Antonescu endorsed Geoana in the second round. If these voters all had switched from their (presumed) sincere first choice by voting strategically for Geoana in the first round, he would have won in the second round rather than Basescu. This is, of course, just a hypothetical scenario, but the world of politics is seemingly full of voters and politicians, who occasionally vote for alternatives other than the one they in their hearts would most like to win. Riker himself supplied examples of strategic voting derived from, among others, US primary elections (Riker 1982: 146ff), the Constitutional convention (Riker 1986: 89-102, 103-05, 1987), labor union elections (Riker 1982: 151ff), legislation before the US House of Representatives (Riker 1982: 152ff, 1986: 114-28) and the Roman senate (ibid.: 78-88).

Finally, there is a third form of "manipulation" that Riker associated with strategic control of the "dimensions" of ideological

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[11] Strategic (insincere) voting is characterized by some voters casting ballots for lower ranked candidates or alternatives in order to avoid even worse outcomes (for them) that otherwise will be selected on the basis of the "setter's" agenda.

space and to which he devoted a large part of his research in his later years (Riker 1982: 208ff, 1984, 1987, 1993, 1996). Manipulation of policy space refers to the strategy of introducing new issues into the political process to such an extent that old equilibria are overturned: Whoever is the all-important median voter in a one-dimensional setting may be much less important if the political arena suddenly has two (or more) dimensions. Previous majority coalitions will split and new ones will form. This type of manipulation—which Riker (1986: 150f) suggested may be the most common and indeed very frequently observed form — is different from mere rhetoric; it works by introducing new alternatives of high salience, e.g., by proposing "killer amendments" or new candidates. The most well-known example given by Riker—and possibly also the most controversial—is his suggestion that by placing slavery on the political agenda, Lincoln undermined the Democrat Party's political dominance (Riker 1982: 214-32, 1986: 1-9). Other examples include constitutional reform (Riker 1986: 10-17), gerrymandering (Riker 1986: 66-77) and parliamentary amendments (Riker 1986: 114-28).

Research in this area is perhaps even more difficult than in the case of cyclical majorities, because the scholar will need information not only about the preferences of the decision makers but also about the intentions of those very politicians who are trying to do one thing by pretending they are doing something else.

3. The present special issue

All in all, Riker used the insights summarized above to conclude that democracy seen as a Rousseauvian manifestation of a "will of the people" is a mirage (cf. Riker 1982: 11-14, 233-53). Personally, he favored what he associated with a Madisonian view and termed a "liberal" view of democracy: "The function of voting is to control officials, *and no more*" (Riker 1982: 9; emphasis in original). Democracy simply will have to suffice to be seen as a method of

controlling officials by subjecting their tenure in office to periodic electoral tests.[12]

This, more normative conclusion, as well as some of the empirics of the cases considered by Riker (1982, 1986), have on occasion been submitted to severe criticism (e.g., Green and Shapiro 1994; Mackie 2003; cf. McLean 2002). For the present purposes we shall not consider the first, normative issue, but rather focus on the latter, i.e., the extent to which Riker's research on social choice has fruitful empirical applications and perspectives. To do so, papers for this special issue were invited from a number of European and North American economists and political scientists interested in Rikerian themes—counting among them several of William Riker's former students and colleagues.

In the special issue's lead article, "On the empirical relevance of Condorcet's Paradox", *Adrian Van Deemen* surveys the many studies of the empirical occurrence (or non-occurrence) of Condorcet cycles, and doing so he extends and supplements earlier surveys (e.g., Gehrlein 1983, 2006; Gehrlein and Lepelley 2011). Van Deemen demonstrates that in terms of the sheer number of studies addressing the paradox's empirical frequency, scholarly interest has increased markedly In the now 60 years of research, the first 30 years produced 10 studies; the next 30 years saw a further 37 studies appearing. He finds that Condorcet's Paradox occurs in about 9% to 10% of the 265 collective choices investigated—a frequency he views as non-negligible, although quite far from Riker's (1982) claim that the paradox is virtually omnipresent. The "evidence is insufficient either to confirm or to refute the statement that the paradox is empirically relevant", Van Deemen concludes. He also notes that mostly regular voter preferences have been observed in the real-world elections that have been investigated, but that relatively few studies deal with collective decision-making processes in smaller groups, such as, e.g., committees, boards, government cabinets and party leaderships.

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[12] Cf. *Federalist* #51, in Hamilton, Jay and Madison [1787] 2001.

Malthe Munkøe provides new empirical research on the latter: In "Cycles and instability in politics: Evidence from the 2009 Danish municipal elections" he examines a number of cases of the selection of mayors following the Danish 2009 local elections. Munkøe finds four instances (out of 97) wherein the preferences of the political parties over who should be selected as city mayor is likely to have been cyclical and for which the selection process was characterized by both strategic behavior and instability.

But given that voting paradoxes may occur and prevent collective choices being made in a coherent way, will some methods be better at picking the "right" alternative, given some normative democratic standard? *Florenz Plassmann* and *Nic Tideman* consider this issue in their contribution, "Which voting rule is most likely to choose the "best" candidate?" Using a spatial model of voting that is capable of simulating voting data with the same statistical structure as data from actual elections, they investigate the frequencies with which 14 voting rules chose this candidate as the winner. The Black rule (i.e., the Condorcet Winner if one exists, otherwise the Borda Winner) tends to perform better than the other rules, especially in elections with few voters. Three methods, including plurality voting, tend to perform worse than the other 11 rules, especially in elections with many voters.

Keith L. Dougherty, Brian Pitts, Justin Moeller and *Robi Ragan* consider a related topic in their paper titled, "An experimental study of the efficiency of unanimity rule and majority rule", wherein they use laboratory experiments to test whether a rule of unanimity or simple majority is best for producing Pareto optimal outcomes. Across a set of alternative specifications, their results favor majority rule. Simple plurality rule is often found to be problematic in practice, even if it is easy to understand and easy to implement.

Peter Kurrild-Klitgaard in his paper, "Picking a loser? A social choice perspective on the Danish government formation of 1975", supplies a Rikerian analysis of the potential inability of the government formation process in Denmark's parliamentary system to ensure the selection of a Condorcet Winner. He demonstrates

that the *de facto* choice in the 1975 process of assembling a governing majority – the plurality rule winner – most likely was ranked fourth out of five (or second of three) in the collective preferences of the members of parliament.

Several papers examine aspects of "heresthetics" in collective decision-making. In "Insincere voting under the successive procedure", *Bjørn Erik Rasch* considers, as the title suggests, the so-called "successive procedure" for legislative voting used in some parliaments, which differs from the sequential "amendment procedure" typically used in the United States and analyzed in-depth by Riker and many others. Looking at data from Norwegian parliaments from 1989 to 2011, Rasch finds that use of the procedure in question seems to make strategic voting rare. *Mogens N. Pedersen*, in the best Rikerian tradition, examines a specific historical vote in his paper, "A Danish killer amendment — when judicial review was banned from the 1849 Constitution", and finds that the possibility of judicial review of legislation by the Danish Supreme Court most likely was "killed" by the introduction of a intentionally manipulative amendment proposed by a shrewd politician.

Another set of papers in this special issue consider specific collective decisions (or sets of such) derived from a range of empirical settings: Elections, parliaments or other institutions and dealing with questions of how differences in distributions of preferences and in institutional arrangements may affect interactions and outcomes. *Nicholas Miller*, in "The Alternative Vote and Coombs Rule versus First-Past-the-Post: A social choice analysis of simulated data based on English elections, 1992–2010", applies numerical simulations to study Rikerian robustness given three alternative voting rules. By looking at survey data from 20 years of general elections in Britain, Miller finds, *inter alia*, that the Liberals would benefit from a move to the Alternative Vote (AV) or the Coombs rule—which is a good explanation for why a majority has not been found in favor of abolishing first-past-the-post as the status quo voting rule. He also finds that the latter rule is the least Condorcet efficient of three: In roughly a quarter of the cases looked

at, plurality rule does not result in the election of a Condorcet Winner, while AV and Coombs pick the "right" outcome in close to 100% of the cases.

Maria Gallego, *Norman Schofield*, *Kevin McAlister* and *Jee Seon Jeon*, in "The variable choice set logit model applied to the 2004 Canadian election", consider the question of where in policy space political parties locate themselves and use the 2004 election in Canada as a case with which to construct a stochastic electoral model. In "Modeling the effects of changing issue salience in two-party competition", *Scott L. Feld*, *Samuel Merrill III* and *Bernard Grofman* investigate party competition and, in particular, how changes in the weighting of issue salience can lead to interchanges in candidates' majorities, even though candidate positions remain fixed. When that happens competition over the salience of issue dimensions can, under certain circumstances, be crucial for determining election outcomes. They demonstrate the empirical relevance of the results with data from the 2000 US presidential election. *John Aldrich*, *Jason Reifler* and *Michael C. Munger* also look at preferences in their paper, "Sophisticated and myopic? Citizen preferences for Electoral College reform", which raises the issue of how the institutions governing elections may affect the outcomes of collective choices. Considering survey data, they find, among other things, that US voters' preferences over Electoral College reform (winner-takes-all versus "proportional" allocation of electors) are influenced by a combination of their partisan preferences and expectations about how various reforms may influence later election outcomes. The authors suggest that good reasons exist for believing that voters behave strategically not only when they vote for candidates, but also when evaluating alternative electoral schemes, thus confirming Rikerian analysis.

In "Coalition formation on the U.S. Supreme Court: 1969–2009", *Steven Brams*, *Gustavo Camilo* and *Alexandra D. Franz* look at data from the United States' highest court and investigate the dynamics of sub-coalitions and majority coalitions to identify "kingmakers"

and "leaders" on the court, as well as how some justices have shifted ideologically over time.

Finally, a group of papers take up Riker's (1964) analysis of federalism as a way of making social choices a perspective he continued to adopt in his normative discussion of "liberal", Madisonian democracy (Riker 1982: 233ff). In "Equilibrium institutions: the federal-proportional trade-off", *Josep M. Colomer* argues that while multiple equilibrium sets of institutions are conceivable, each involves some trade-off between the size of the country, the territorial structure of subnational governments, if any, and the electoral system in place. He concludes that the larger the area of a country, the more important is federalism in comparison to the other, more centralized governance arrangements. The explanatory power of the model is positively tested with all current durable democratic countries and illustrated the context of various case studies. In "Institutions, information, and faction: An experimental test of Riker's federalism thesis for political parties", *John Aldrich*, *Michael C. Munger* and *Jason Reifler* investigate Riker's view of the US federal structure as being a "bargain" between national, state and local governments in terms of the division of power in partisan control. Using data from a survey-based experiment, they offer an empirical investigation of Rikerian insights and find that voters' views on reform of primary elections towards the so-called "blanket primary" are influenced by information about that institution's effects. The findings strongly support the claim that an understanding of the implications of the federal "bargain" condition strategic behavior of voters.

4. Conclusion and perspectives

Over the last several decades, Riker's work in *Liberalism against populism* has been challenged by a number of prominent critics (Green and Shapiro 1994; Mackie 2003), essentially arguing—among other points—that the program is irrelevant empirically. Contrary

to such generalizations, the research included in the present special issue demonstrates that 30 years after the publication of *Liberalism against Populism* the Rikerian research program is not only alive and well but producing fresh and fruitful insights (cf. McLean 2008).

At the same time it bears noting that the long search for cyclical preferences and voting cycles perhaps may be stalling somewhat (even if the number of studies is not in visible decline), possibly due to an emerging understanding that the marginal payoff to additional study is small. We now know—contrary to the perhaps naïve "populist" theories of democracy of earlier times—that cycles may exist and therefore should be taken seriously as possibilities—but we also know that they seem to be occurring much less frequently than perhaps first thought by social choice theorists.

Accordingly, the research program has been moving on: To the study of effects of alternative methods of social choice; to the strategic behavior of political actors; to the application of such insights to the evaluation and design of alternative institutional arrangements. There is nothing to suggest that these are issues that will become less important in a world that in the years since the publication of *Liberalism against populism* has seen still more countries move towards democracy.

References

Aldrich, J. H. (2004). William H. Riker. In C. K. Rowley & F. Schneider (Eds.), *The encyclopedia of public choice* (pp. 321-324), Vol. 2. Dordrecht: Kluwer.

Amadae, S. M. & Bueno de Mesquita, B. (1999). The Rochester School: The origins of positive political theory. *Annual Review of Political Science 2*, 269-295.

Arrow, K. J. ([1951] 1963). *Social choice and individual values* (2. ed.). New Haven: Yale University Press.

Black, D. (1948). On the rationale of group decision making. *Journal of Political Economy 56*, 23-34.

Brams, S. J. & Fishburn, P. C. (1978). Approval voting. *American Political Science Review 72*, 831-847.

Buchanan, J. M. & Tullock, G. ([1962] 2004). *The calculus of consent: Logical foundations of constitutional democracy*, The Selected Works of Gordon Tullock, Vol. 2, C. K. Rowley (Ed.). Indianapolis: Liberty Fund.

Bueno de Mesquita, B. & Shepsle, K. A. (2001). William Harrison Riker, September 22, 1920 - June 26, 1993. *Biographical Memoirs of the National Academy of Sciences 79*, 3-22.

Campbell, C. & Tullock, G. (1965). A measure of the importance of cyclical majorities. *Economic Journal 75*, 853-857.

DeMeyer, F. & Plott, C. R. (1970). The probability of a cyclical majority. *Econometrica 38*, 345-354.

Dobra, J. L. & Tullock, G. (1981). An approach to empirical measures of voting paradoxes. *Public Choice 36*, 193-194.

Downs, A. (1957). *An economic theory of democracy*. New York: Harper Collins.

Dyer, J. S. & Miles, R. E. (1976). An actual application of collective choice theory to the selection of trajectories for the Mariner Jupiter/Saturn 1977 project. *Operations Research 24*(March), 220-244.

Garman, M. B. & Kamien, M. I. (1968). The paradox of voting: Probability calculations. *Behavioral Science 13*(July), 306-316.

Gehrlein, W. V. (1983). Condorcet's paradox. *Theory and Decision 15*, 161-197.

Gehrlein, W. V. (2006). *Condorcet's paradox*. Berlin: Springer.

Gehrlein, W. V. & Fishburn, P. C. (1976). The probability of the paradox of voting: A computable solution. *Journal of Economic Theory 12*(August), 14-25.

Gehrlein, W. V. & Lepelley, D. (2011). *Voting paradoxes and group coherence*. Berlin: Springer.

Gibbard, A. (1973). Manipulation of voting schemes. *Econometrica 41*, 587-601.

Goodin, R. E. & Klingemann, H.-D. (1996). Political science: The discipline. In R. E. Goodin & H.-D. Klingemann (Eds.), *A new handbook of political science* (pp. 3-49). Oxford: Oxford University Press.

Green, D. P. & Shapiro, I. (1994). *Pathologies of rational choice: A critique of applications in political science*. New Haven: Yale University Press.

Hamilton, A., Jay, J., & Madison, J. ([1787] 2001). *The Federalist* (Gideon ed.), G. W. Carey & J. McClellan (Eds.). Indianapolis: Liberty Fund.

Härd, S. (2000). Arbitrary democracy. In N. Berggren, N. Karlson, & J. Nergelius (Eds.), *Why constitutions matter* (pp. 137-166). Stockholm: City University Press.

Jamison, D. T. (1975). The probability of intransitive majority rule: An empirical study. *Public Choice 23*, 87-94.

Jones, B., Radcliff, B., Taber, C. S., & Timpone, R. J. (1995). Condorcet winners and the Paradox of Voting: Probability calculations for weak preference orders. *American Political Science Review 89*(1), 137-144.

Kurrild-Klitgaard, P. (1999). *Voting, agenda control and the Clinton impeachment,* Paper presented at Danish Public Choice Workshop, 17 September 1999, Aarhus. Aarhus: Dept. of Political Science, University of Aarhus.

Kurrild-Klitgaard, P. (2005). *Individ, stat og marked: Studier i rationalitet og politik.* København: Forlaget Politiske Studier.

Kurrild-Klitgaard, P. (2008). Voting paradoxes under proportional representation: Evidence from eight Danish elections. *Scandinavian Political Studies 31*(3), 242-267.

Kurrild-Klitgaard, P. (2013). Election inversions, coalitions and proportional representation: Examples of voting paradoxes in Danish government formations. *Scandinavian Political Studies 36*(2), 121-136.

Levine, M. E. & Plott, C. R. (1977). Agenda influence and its implications. *Virginia Law Review 63*(4), 561-604.

Mackie, G. (2003). *Democracy defended*. Cambridge: Cambridge University Press.

Malkevitch, J. (1990). Mathematical theory of elections. *Annals of the New York Academy of Sciences 607*, 89-97.

Maske, K. & Durden, G. (2003). The contributions and impact of Professor William H. Riker. *Public Choice 117*, 191-220.

McKelvey, R. D. (1976). Intransitivities in multidimensional voting models and some implications for agenda control. *Journal of Economic Theory 12*, 472-482.

McKelvey, R. D. & Ordeshook, P. C. (1984). The influence of committee procedures on outcomes: Some experimental evidence. *Journal of Politics 46*, 182-205.

McLean, I. (2002). William H. Riker and the invention of heresthetic(s). *British Journal of Political Science 32*, 535-558.

McLean, I. (2008). In Riker's footsteps. *British Journal of Political Science 39*, 195-210.

McLean, I. & Hewitt, F. (Eds.) (1994). *Condorcet: Foundations of social choice and political theory*. Aldershot: Edward Elgar.

McLean, I. & Urken, A. B. (Eds.) (1995). *Classics of social choice*. Ann Arbor: University of Michigan Press.

Miller, N. R. (2011). Why the Electoral College is good for political science (and public choice). *Public Choice 150*, 1-25.

Miller, N. R. (2012). Election inversions by the U.S. Electoral College. In D. S. Felsenthal & M. Machover (Eds.), *Electoral systems: Paradoxes, assumptions and procedures* (pp. 93-127), Studies in Choice and Welfare. Berlin: Springer.

Miller, N. R. (2013). Election inversions under proportional representation, Paper presented at the Annual Meeting of the Public Choice Society, New Orleans, March 8-10 2013.

Mitchell, W. C. (1988). Virginia, Rochester and Bloomington: Twenty-five years of public choice and political science. *Public Choice 56*, 101-119.

Mitchell, W. C. (1994). William H. Riker (1921-1993). *Public Choice 78*, iii-iv.

Mitchell, W. C. (1999). Political science and public choice: 1950-70. *Public Choice 98*, 237-249.

Mueller, D. C. (2003). *Public choice III*. Cambridge: Cambridge University Press.

Niemi, R. G. & Weisberg, H. F. (1968). A mathematical solution for the probability of the paradox of voting. *Behavioral Science 13*(July), 317-323.

Nurmi, H. (1987). *Comparing voting systems*. Dordrecht: Reidel.

Plott, C. R. (1967). A notion of equilibrium and its possibility under majority rule. *American Economic Review 57*, 787-806.

Plott, C. R. & Levine, M. E. (1978). A model of agenda influence on committee decisions. *American Economic Review 68*, 146-160.

Regenwetter, M., Grofman, B., Marley, A. A. J., & Tsetlin, I. M. (2006). *Behavioral social choice: Probabilistic models, statistical inference, and applications*. Cambridge: Cambridge University Press.

Riker, W. H. (1958). The paradox of voting and congressional rules for voting on amendments. *American Political Science Review 52*(2), 349-366.

Riker, W. H. (1962). *The theory of political coalitions*. Yale: Yale University Press.

Riker, W. H. (1964). *Federalism: Origin, operation, significance*. Boston: Little Brown.

Riker, W. H. (1965). Arrow's Theorem and some examples of the paradox of voting. In J. M. Claunch (Ed.), *Mathematical applications in political science* (pp. 41-60). Dallas: Southern Methodist University Press.

Riker, W. H. (1980). Implications from the disequilibrium of majority rule for the study of institutions. *American Political Science Review 74*(2), 432-446.

Riker, W. H. (1982). *Liberalism against populism: A confrontation between the theory of democracy and the theory of social choice*. San Francisco: W.H. Freeman.

Riker, W. H. (1984). The heresthetic of constitution-making: The presidency in 1787. *American Political Science Review 78*(1), 1-16.

Riker, W. H. (1986). *The art of political manipulation*. New Haven: Yale University Press.

Riker, W. H. (1987). The lessons of 1787. *Public Choice 55*(1-2), 5-34.

Riker, W. H. (1988). The place of political science in public choice. *Public Choice 37*, 247-257.

Riker, W. H. (Ed.) (1993). *Agenda formation*. Ann Arbor: Michigan University Press.

Riker, W. H. (1996). *The strategy of rhetoric: Campaigning for the American constitution*. New Haven: Yale University Press.

Saari, D. G. (1994). *Basic geometry of voting*. Berlin: Springer Verlag.

Satterthwaite, M. A. (1975). Strategy-proofness and Arrow's conditions: Existence and correspondence theorems for voting procedures and social welfare functions. *Journal of Economic Theory 10*, 187-217.

Schofield, N. (1978). Instability of simple dynamic games. *Review of Economic Studies 45*, 575-594.

Shepsle, K. A. & Bonchek, M. S. (1997). *Analyzing politics: Rationality, behavior, and institutions*. Princeton: Princeton University Press.

Shepsle, K. A. & Weingast, B. R. (1981). Structure-induced equilibrium and legislative choice. *Public Choice 37*(3), 503-519.

Shepsle, K. A. & Weingast, B. R. (2012). Why so much stability? Majority voting, legislative institutions, and Gordon Tullock. *Public Choice 152*(1-2), 83-95.

Smith, W. D. (2009). The Romanian 2009 presidential election featured one or more high Condorcet cycles, http://rangevoting.org/Romania2009.html.

Timpone, R. J. & Taber, C. S. (1998). Simulation: Analytic and algorithmic analyses of Condorcet's Paradox - variations on a classical theme. *Social Science Computer Review 16*(1), 72-95.

Van Deemen, A. M. A. & Vergunst, N. P. (1998). Empirical evidence of paradoxes of voting in Dutch elections. *Public Choice 97*(3), 475-490.

Wright, S. G. & Riker, W. H. (1989). Plurality and runoff systems and numbers of candidates. *Public Choice 60*(2), 155-175.

Table 1. The 2009 Romanian presidential election: Summary of votes and vote shares.

Candidate	Party	1st round votes (share) (22 November 2009)	2nd round (runoff) votes (share) (6 December 2009)
Traian Basescu	Democratic Liberal Party (PDL)	3,153,640 (32.44%) (plurality winner)	5,275,808 (50.33%) (runoff winner)
Mircea Geoana	Social Democratic Party (PSD) & Conservative Party (PC)	3,027,838 (31.15%)	5,205,760 (49.66%)
Crin Antonescu	National Liberal Party (PNL)	1,945,831 (20.02%)	-
Corneliu V. Tudor	Greater Romania Party	540,380 (5.56%)	-
Hunor Kelemen	Democratic Union of Hungarians in Romania	372,761 (3.83%)	-
Sorin Oprescu	Independent	309,764 (3.18%)	-
George Becali	New Generation Party	186,390 (1.91%)	-
Remus Cernea	Green Party	60,539 (0.62%)	-
Constantin Rotaru	Socialist Alliance Party	43,684 (0.45%)	-
Gheorghe-Eduard Manole	Independent	34,189 (0.35%)	-
Ovidiu-Cristian Iane	Ecologist Party	22,515 (0.23%)	-
Constantin-Ninel Potirca	Independent	21,306 (0.21%)	-
Totals		9,718,837 (100%)	10,481,568 (100%)
Invalid votes		227,446 (2.28%)	138,476 (1.30%)
Turn-out		54.4%	58.0%

Sources: Smith 2009, corrected with data from Biroul Electoral Central (http://www.bec2009p.ro/rezultate.html).