

Referendum Rules and Social Choice

Introduction

It is often argued that in an ideal democracy, all citizens would participate directly in all decision-making. According to this view, although the ideal of direct democracy cannot be realized in large modern state, direct decision-making methods should be used whenever they are feasible. In a modern state, a referendum¹⁰ is the best approximation of direct participation. Those who are unwilling to accept the argument are often accused of elitism. It is supposed that the only relevant question is whether people are regarded as sufficiently competent to make decisions directly rather than through representative mechanisms.

This reasoning, however, ignores one aspect of decision-making: the role of agenda formation. In all decision making, the content of decisions largely depends on details: which issues are submitted to decision-making, how the alternatives are formulated, what is the timing of the decision-making, in which order the alternatives are voted on and what is the method of vote aggregation. In this chapter, my aim is to focus on one aspect of agendas in direct decision-making, namely the number of alternatives voted on. Interestingly, there is very little theoretical discussion on these problems in the referendum context. In the normative works on democracy, the dichotomous setting is usually taken to be as self-evident. In the empirical literature (e.g. Butler & Ranney 1994; Serälä 1999; Budge 1996; Bowler, Donovan & Tolbert 1998), the issue is occasionally mentioned, but almost never treated in a systematic way. In the theory of social choice, parliamentary practices and electoral rules are analyzed in detail (e.g. Felsenthal 2012; Nurmi 2012), but the referendum rules are generally ignored. Nevertheless, there are several ways to conduct multiple-option referenda. Many of these methods are not used in other decision-making contexts. My aim here is, first, to relate the agenda problem to earlier discussions on social choice and on referenda, and then, to study the social choice properties of the multi-option referendum methods in actual use. My argument is that there are unavoidable trade-offs between different democratic desiderata. This, however, does not constitute a decisive argument against the use of referenda.

¹⁰ "Referendum" is used here as general term for direct mass vote on a specified issue. Quite often, the term is reserved for cases in which a legislative proposal, a constitutional amendment, or (at the local level) a political decision is submitted to the voters who can then either ratify or reject it. Ad hoc direct decisions which are not legislative acts and which are initiated by the government are often called "plebiscites", while proposals initiated by citizens are called "people's initiatives". Here, they are dealt with together. There are of course important differences between, say, a plebiscite on independence in a separatist province and a regular referendum in a Swiss canton. Nevertheless, the social choice properties of the voting-rules may be similar in both cases.

Social choice and Weber's problem

Typically, referendum democracy presupposes two features. First, issues that are voted on can be treated separately. Second, the number of meaningful policy alternatives in every referendum is two. If these two suppositions are in force, decision-making can be reduced to a series of separate dichotomous acts of choice. The intuitive appeal of dichotomous choice is related to the intuitive strength of the simple majority rule. The celebrated May's Theorem seems to capture at least some part of our pre-theoretical idea of fairness embodied in the simple majority choice. The theorem simply says that when there are two alternatives, the simple majority principle is the only rule which satisfies the decisiveness, anonymity, neutrality and monotonicity requirements. This result has impressed many theorists of democracy (Ackerman 1980: 277-85; Dahl 1989: 139-41; Weale 1999: 129-30). It seems to show why the simple majority principle is a fair way to make decisions.

However, the even more famous Arrow's Theorem shows that when there are three or more options, all logically possible voting rules violate at least some intuitively plausible conditions. One possible way to avoid the problem is to reduce the number of options on agendas to two. This is, indeed, the case in most nationwide referenda: they provide only two alternatives for voters. Some proponents of direct democracy argue that this property of referenda would actually make them immune to the criticism based on the theory of social choice. The distribution of votes does not create any problems of interpretation. Most notably, cycles and strategic voting are excluded. (Budge 1993: 153; Budge 1996: 117; Barber 1984: 204-5). However, the limitation of choices transfers an essential power to those whose task is to formulate the alternatives submitted to voters and to exclude other choices. Although a majority choice between two alternatives is, in itself, fair, the way in which agenda-setters end up with just these particular alternatives may be very unfair. Some potential options excluded by the agenda setters might have been more popular than either of the alternatives submitted to the people. This unfairness is easier to conceal than the unfairness of a decision rule (Riker 1982: 63, 65).

The agenda problem is especially clear when the agenda power lies in the hands of a small number of political actors – say, of a government or a President. It is obvious that the plebiscites organized in authoritarian systems (by Hitler, Mussolini or Pinochet, for example) have no genuine legitimating force. Even when votes are honestly counted and voters are not subjected to coercion or intimidation, the alternatives put forth in authoritarian plebiscites are not created in an open and non-manipulative agenda-formation process.¹¹ Even in established democracies, the agenda may sometimes be perceived as unfair. For example, in the referendum in Australia (1999) voters were asked to choose between monarchy and a republic headed by an indirectly elected President. 54.9 % of the Australians voted for the monarchical form of government,

¹¹ About the strategic use of plebiscites in the French Fifth Republic, Chile and in the post-Soviet states, see Walker (2003) and Altman (2011, ch. 5). For the history and political theory of plebiscitary rule, see Denquin (1976).

although, according to some opinion polls, over 80 % of them actually preferred a republic. According to many commentators, most Australians would have voted for a republic with a directly elected President, but preferred a monarchical government to a President appointed by the Parliament (Mackerras & Cotton 2000; Higley & McAllister 2002). Mitchell's (2002) detailed study of opinions shows that the direct election alternative was a Condorcet winner, in other words, the option that would beat all the competing options in pairwise majority voting. But it was not on the agenda. One branch of political thinking sees the dichotomous nature of referenda as a vice rather than a virtue. According to Max Weber

'both as an electoral and a legislative instrument, the popular referendum has inner limits which follow from its technical peculiarity. The only answers it gives are 'Yes' and 'No.' (Weber 1918/1994: 225)¹²

Weber argued that a referendum cannot work as an instrument of compromises. Moreover, because a negative answer delivered in a referendum does not provide information about the reasons behind the rejection, it cannot effectively guide official action. Both problems are related to the dichotomous nature of choices. Another social choice argument – which could be interpreted as a formal version of Weber's argument – emphasizes the *arbitrary* nature of referendum results rather than their manipulability. For example, Philip Pettit (2003) argues that a series of uncoordinated yes-no majority choices may easily lead to a combination of outcomes which is unwanted, impractical or even mutually inconsistent.

Arguably, there are issues which are "naturally" interpreted as dichotomous: the Swedish referendum on whether cars should be driven on the right or on the left side of the road (1955) may provide an example. In most political issues, however, the choice is not *self-evidently* a dichotomous one. The most obvious examples of artificial misuse of the referendum device are "ratification referenda" in which people are, for example, asked to accept or reject an entire constitution with all its details, or to give their assent to a regime or to a complex package of policies. In such cases the "no" alternative has no specified meaning. Voters are left to make their own guesses of what effects their choice might have. They cannot be sure whether a new constitution drafted after the rejection of the original proposal would be better or worse than the rejected one, or whether the regime would really abdicate or change its policies after a popular vote of non-confidence. Nor can the government learn what went wrong if the package they offered the people was rejected. However, as we shall see, there is no inherent reason why a referendum should be arranged between only two alternatives. Weber's claim that 'Yes' and 'No' are the only possible answers is simply untrue. However, if there are more than two options, the social choice problems become, again, potentially relevant.

¹² Weber's argument became a commonplace in the inter-war German discussion. For example Erich Kaufmann, a conservative legal theorist, wrote in a similar vein: 'By the very nature, so called direct plebiscites do not permit the plurality to take positive, substantive action. It can only answer the question that is put to it with yes or no. (...) Everything depends on the content of the question – and the plurality cannot participate or even exert influence over its formulation. Here there is no deliberation, no discussion, no possibility of amendment – only consent or denial of consent. This is the first law of formation of the people's will: the more directly the people as plurality wishes to speak, the less influence it will have on the substance of what actually happens.' (Kaufmann 1931/2002: 201.)

The problems of plurality

The plurality rule is one of the oldest and most popular ways to choose between several candidates. In nation-wide referenda, it has been used for example in Puerto Rico, (1993 and 1998), Singapore (1962), Guam (1982) and Curacao (1995). In Sweden, it has been used twice: in 1957 (referendum on supplementary benefits) and in 1980 (nuclear energy). In the 1996 Slovenian referendum on the electoral system the criterion of winning was not clearly specified. At least one instance of the use of the plurality runoff method can be found: in the referendum on the future status of Newfoundland (in 1948) there were two rounds. The Australian unofficial referendum on the national anthem (1977) used the instant-runoff rule.

The plurality rule has its well-known problems. Consider the following example (in which the columns indicate voters' preference orderings between options *a*, *b* and *c*, while the numbers above them indicate the number of voters having the preferences):

TABLE 1.

24	36	40	voters
a	b	c	
b	a	a	
c	c	b	

A minimum criterion for a majoritarian decision-making rule is that it chooses *absolute winners* (options which have the first-preference support of at least $(N/2) + 1$ voters). A slightly stronger criterion is that it never chooses *absolute losers*; a considerable stronger majoritarian criterion is that it always chooses a Condorcet winner. Most rules used in elections and in committee decision-making satisfy the absolute loser criterion; very few satisfy the Condorcet criterion. The example shows why the plurality rule is problematic from the majoritarian point of view: it satisfies only the absolute winner criterion. If all the voters in the example vote according to their preferences, the plurality rule chooses *c*. Still, the majority of the voters (60 of them) consider it the worst choice. In the example, *a* is the Condorcet winner, that is, the option which would win all pairwise majority comparisons. Option *c* is an absolute loser, that is, the one regarded as the worst by an absolute majority.

Plurality rule is subject to *agenda manipulation* because the presence or absence of losing options may determine the final choice. Let us assume that in the situation depicted in Table 1 the agenda setter favours *c*. Suppose that the original set on the agenda is $\{a, c\}$. To prevent the victory of *a*, the agenda setter contrives a third option, *b*, which is likely to divide the opponents of *c* so that the latter becomes a plurality winner. In order to prevent ambiguous results, committees and legislative assemblies almost invariably use methods that are more complex and allow the expression of other than first preferences. One may argue that plurality is particularly unsuitable for legislative purposes.

The Swedish consultative referendum on nuclear energy in 1980 provides an example of the problems involved in plurality rule. In the referendum, Line 1 was clearly pro-nuclear and Line 3 was equally clearly anti-nuclear, while Line 2 (put forward by the Social Democrats, who were mainly for the use of nuclear power, but could not join a common campaign with their Conservative opponents) was basically pro-nuclear, but called for research on renewable energy sources, a tightened security control and state ownership of all important energy-producing plants in the future. The result was the following:

Line 1	18.9 % of the votes
Line 2	39.1 %
Line 3	38.7 %

Line 2 was considered the winner. One may wonder how the numbers would have been interpreted if a plurality (but not a majority) of the voters had supported Line 3. According to Setälä (1999: 110–23), the interpretation problem was visible from the start, and no consensus was reached. The leader of the Centre Party, Torbjörn Fälldin, took the position that votes for Line 1 and Line 2 should be considered pro-nuclear votes. The chairman of the national campaign for Line 2 argued that if Line 2 and Line 3 together receive an absolute majority, nuclear power plants should be closed. The Social Democratic leader, Olof Palme, maintained that if none of the proposals achieved an absolute majority, Line 2 should be implemented even if it were a plurality loser. The ambiguous outcome of the referendum allowed the pronuclear power parties, who had a majority in the Riksdag, to settle the issue. Some believed that the antinuclear option would have been victorious in a straight fight with only one pro-nuclear option (Bogdanor 1994: 76). A somewhat similar problem of interpretation appeared in Sweden in the 1957 referendum on supplementary benefits. The Social Democratic proposal was supported by a plurality (45.8 %), while the two competing proposals of the non-socialist parties shared the rest of the support. Hence, the reform was postponed until, after several votes in the Parliament, the Social Democratic proposal won with one vote.

The other uses of plurality rule in referenda have been equally controversial. In Puerto Rico, the opposition has accused the government party (*Partido Nuevo Progresista*) of attempting to manipulate the agenda (Guelke 2001: 241–2). In Singapore in 1962, almost a fourth of the voters cast an invalid vote as a protest against the agenda. In the Slovenian referendum on the electoral system in 1996, there were three options. A people's initiative, sponsored by the Social Democrats, would have replaced the existing PR-system by a plurality runoff system. However, another parliamentary group responded to the initiative by proposing a modified PR alternative, while the Slovenia second chamber passed a resolution to call a referendum on a mixed-member system. Due to the divisive questions and lack of clarity, no proposal won a majority, although the runoff rule was the plurality winner with 44 % support. Two years later, the Constitutional Court issued a review in which it instructed the Slovenian Parliament to accept the runoff rule as the winner. Thus, the Court's view was that

a plurality was sufficient, while the Parliament required an absolute majority. In the tumultuous situation, the Parliament failed to act. (Nikolenyi 2011: 615-6.) In Setälä's work Newfoundland's runoff referendum (1948) was presented as a prime example of an attempt to manipulate the alternatives (Setälä 1999: 29).

The Swiss practices

Switzerland is one of the very few countries in the world where the law explicitly provides means for *nation-wide* referenda with more than two options. Many referenda in Switzerland are based on popular initiatives. The government cannot change the questions voted on, but it can meet a popular initiative with its own counterproposal, which usually contains some elements of the original initiative. The Swiss government has consciously used a divide-and-conquer strategy in agenda formation. Before 1987, a voter could vote either for the original initiative or for the counterproposal, but not for both. If neither got an absolute majority, both the initiative and the counter-initiative were rejected, and the *status quo* maintained. Using this method, the government was able to divide the opposition and sometimes maintain the status quo even when an absolute majority was against it (Delley 1978: 106-8; Kobach 1993: 356; Kobach 1994: 104). Manipulation by adding divisive options was even easier than with the plurality rule. For example, in 1955 both an initiative concerning consumers' and lessees' protection and the counterproposal failed, although their joint support was over 90 % of those who participated. In this case the *status quo* would probably have been an absolute loser. Table 1. may be used to illustrate the situation. Let *b* be the initiative, *a* the counterproposal and *c* the *status quo*. In the example, the third option wins although it is considered as the worst choice by a majority of voters.

The Swiss law was changed for the very reason that it invited agenda manipulation. Since 1987, the Swiss voters have had the right to vote "yes" *for both an initiative and its counterproposal*.¹³ Under this rule, it is possible that both an initiative and its counterproposal are approved by more than 50 % of the voters. Thus, voters have also to answer to a supplementary question (*Stichfrage, question subsidiaire*): "Should both projects be accepted, which one would you prefer to become law?" The proposal supported by the majority is chosen. Even those who reject both proposals are allowed to answer the supplementary question. (The same practice is used in the cantons of Bern, Zürich and Nidwalden.)

Obviously, the pre-1987 method violated weak neutrality by favoring the *status quo*. Less obviously, the post-1987 rule (the so-called *Haab rule*) is also non-neutral. This can be seen by considering the familiar Condorcet paradox.

¹³ The Swiss Constitution, Art 139 b: 'Ils peuvent approuver les deux projets à la fois. Ils peuvent indiquer, en réponse à la question subsidiaire, le projet auquel ils donnent la préférence au cas où les deux seraient acceptés.'

TABLE 2.

33	33	33	voters
a	b	c	
b	c	a	
c	a	b	

Assume that *c* is the *status quo* and *a* and *b* are an initiative and its counterproposal. All the options have exactly the same number of first, second and third places in voters' rankings. However, only the counterproposal *b* is able to beat the *status quo* in pairwise comparison. Thus, it is selected, although it loses to initiative *a*. Hence, the new rule is non-neutral because it is slightly biased *against* the *status quo*.

In an interesting case-study on a referendum in the canton of Bern, Bochsler (2009) shows that the problem appearing in Table 2 is not merely a theoretical possibility. In a referendum in Bern 2004 on a revision of the law on the salaries of state employees, there were three options. Under the status quo (SQ) there was an automatic yearly salary increase for all. The majority in the cantonal parliament (*Grosser Rat des Kantons Bern*), consisting of the right-wing parties, wanted to introduce a performance-based system (GR), while the people's initiative (*Volksvorschlag*), supported by the left-wing parties, was a compromise (VV) between the parliament's proposal and the status quo. The results of the referendum were as follows:

GR (51.6 %) > SQ (48.4 %)
SQ (50.6 %) > VV (49.4 %)
VV (51.1 %) > GR (48.9 %)

Thus the collective preferences revealed in the results of the referendum were cyclical. Because of the non-neutral character of the rule, the proposal put forth by the parliament (GR) became the outcome, although it was beaten by the popular initiative (VV). Interestingly, Bochsler argues that the result was due to strategic manipulation. The issue could plausibly be conceived as one-dimensional, the popular initiative (VV) lying in the middle between the two extremes (GR and SQ). Nevertheless, the right-wing parties and the employers' organizations recommended the voters to express the preference ordering GR>SQ>VV, which seems to be incompatible with the parties' true preferences. Their presumed aim was to utilize the non-neutral character of the voting rule by creating a cycle. If one percent (about 2000 voters) of those who participated had expressed the preference VV>SQ instead of the opposite preference recommended by the Right, the VV-alternative would have been the outcome.

Nevertheless, from the majoritarian point of view the Haab rule is clearly better than its predecessor. Unlike the old rule, the Haab rule cannot choose an absolute loser. If all voters vote sincerely, and express their full preferences the Haab rule chooses the Condorcet winner (if there is one) from a set of three options.

California

From the United States, we have several examples of state-wide referenda with more than two options. Usually the competing proposals (sometimes as many as four or five) are all popular initiatives, while the Swiss counterproposals are always put forth by the government.¹⁴

The most common rule used in the US referenda is that voters are allowed to endorse more than one competing initiative, but not an initiative and the *status quo*. If two incompatible initiatives receive more than 50 % support, the one with a larger majority is the winner.¹⁵ There is no supplementary question. The rule described above works quite like the approval voting rule, with one exception. While approval vote is neutral, the referendum rule is slightly biased against the *status quo*. The following example gives an illustration of the non-neutral nature of the rule.

TABLE 3.

60	40	voters
a	b	
b	c	
c	a	

Let us compare the following two cases: Case (1): *a* and *b* are competing initiatives; *c* is the *status quo*. The majority of the 60 voters approve both *a* and *b*. Then, *b* is the winner. Case (2): *a* and *c* are competing initiatives; *b* is the *status quo*. Therefore, the 60 voters are not allowed to express their second preference, and *a* is the winner, although the distribution of preferences is the same as in Case (1). The outcome depends on the identity of the alternatives, not only on the distribution of preferences. Hence, the rule cannot be neutral.

Another consequence of the practice which allows the opponents but not the supporters, of the *status quo* to vote for more than one proposal is that an absolute winner (the alternative ranked as first by more than a half of the voters) may lose. For if more than one of the competing initiatives receives over 50 % of the votes, the one with the largest majority support is chosen. If the opponents of the *status quo* endorse more than one proposal "for security's sake", a proposal regarded only as the second best by the majority of voters may win. This is shown by the following example:

¹⁴ Some of the US methods were discussed by Herbert Tingsten in his early study on the referendum institution. His work also contains perceptive observations about the strategic properties of the rules. (Tingsten 1923: 178–82.)

¹⁵ The Constitution of California Art 2. Sec 10(6) 'If provisions of 2 or more measures approved at the same election conflict, those of the measure receiving the highest affirmative vote shall prevail.' Cf. the Constitution of Michigan, Art II Sec 9.

TABLE 4.

50	10	20	20	voters
a	a	c	b	
b	c	a	c	
c	b	b	a	

Although *a* is the absolute majority winner, *b* is the outcome if the 50 voters with the preference $a > b > c$ endorse both *a* and *b*. This property is shared by the approval voting. Under both rules the outcomes are highly dependent on the way the voters choose to express their second (or lower) preferences (Saari & van Newenhizen 1988).

Andrew Skabalan (1998) discusses a real life example of strategic voting in a Californian referendum. In 1990, the Californians voted on the legislators' term limits. There were three options: Proposition 131 placed twelve-year term restrictions on all members of the State legislatures, while the competing Proposition 140 placed six- and eight-year term restrictions on the members of the State Assembly and Senate respectively. The third option was the *status quo* with no term-restrictions. The opinion measurements show that the median (the Condorcet-winner), was close to Proposition 140: about 60 % of the voters supported term limits of three to nine years. However, because the preferences of the Californian voters were single-peaked – most of those who supported the more limiting Proposition 140 also considered the less strict Proposition 131 as the second-best – the situation was close to that depicted in Table 4. However, in the referendum most supporters of Proposition 140 voted against their second-best, Proposition 131. The former passed with 52 % of the votes, while the latter did not come even close to getting a majority. In this case, strategic voting produced, in Condorcetian terms, a better result than “straight” voting. But it should be noticed that while the strategy of voting against the second-best did help the Condorcet-winner in this particular case, it might also hurt a Condorcet-winner in some possible cases. If *all* voters choose a truncation strategy, voting only their most favoured alternatives, the non-neutral bias of the Californian system is switched *for the status quo*. If all the voters express only their first preferences, and if no single proposal is considered as the best by an absolute majority, the *status quo* is maintained even when it is a Condorcet loser. In such a case the system would work quite like the Swiss system before 1987.

Maine

In the state of Maine, the referendum rule is slightly more sophisticated.¹⁶ At the first stage, it works like the Swiss pre-1987 rule: it allows voters to vote either for any initiative or against all initiatives. If all the initiatives together collect more than a

¹⁶ The Constitution of Maine, Art. IV Sec 18.2. 'When there are competing bills and neither receives a majority of the votes given for or against both, the one receiving the most votes shall at the next statewide election to be held not less than 60 days after the first vote thereon be submitted by itself if it receives more than 1/3 of the votes given for and against both.'

half of the votes but none of them alone has an absolute majority, a new round is arranged between the plurality winner of the first round and the *status quo*. However, the condition for arranging a second round is that the plurality winner collects at least a third of all votes cast in the first round. The second round is clearly an improvement to the Californian and the Swiss pre-1987 rules. Nevertheless, a bias for the status quo is inbuilt even in the Maine rule. Consider this case:

TABLE 5.

32	30	38	voters
a	b	c	
b	a	b	
c	c	a	

The outcome is again the absolute loser, *c*, for neither of the competing initiatives passes the one-third threshold. Like the plurality rule and the Californian rule, the Maine rule is subject manipulation by divisive proposals. It has a further defect, illustrated in the following example:

TABLE 6.

34	20	38	voters
a	b	c	
c	a	a	
b	c	b	

In this case, proposal *a* just satisfies the one-third requirement. Thus, it enters into the second round and wins. But suppose that 15 of those voters ranking *c* as their favoured choice had cast their votes for *b* in the first ballot. Then *b* would have entered into the second round instead of *a* and had lost against *c*. By voting against their true preferences, these 15 voters could help their favoured alternative to victory. In other words, the Maine rule shares a property common to all elimination rules (for example, the runoff and alternative vote): it violates the monotonicity requirement.

Washington

Yet another method to deal with several proposals is used in the State of Washington.¹⁷ There, voters are asked first to express their preferences for or against a change, and then to express their first preference among the competing initiatives. Thus, those who

¹⁷ The Constitution of Washington, Art. II Sec. 1. 'When conflicting measures are submitted to the people the ballots shall be so printed that voter can express separately by making one cross (X) for each two preferences, first, as between either measure and neither, and secondly, as between one and the other. If the majority of those voting on the first issue is for neither, both fail (...). If a majority voting on the first issue is for either, then the measure receiving a majority of the votes on the second issue shall be law.'

rank the *status quo* as the best choice are also allowed to express their second preference. If the status quo does not get an absolute majority, the winner is the most popular initiative. From a majoritarian point of view, this rule seems to be an improvement: it would pick the Condorcet winner in all the cases discussed above, and it would never choose an absolute loser.

However, the Washington rule is non-neutral. It is slightly biased *against* the *status quo*, for it does not allow the expression of a second preference for it. This can be seen in the following example.

TABLE 7.

30	25	45	voters
a	b	c	
c	c	b	
b	a	a	

The Washington rule lumps together the votes for the competing initiatives *a* and *b* as "votes for change". The *status quo* option *c* is a Condorcet winner for it is the second best for the supporters of the competing initiatives. But their second preferences are not counted. Hence, initiative *b* wins. Hence, the Washington rule does not always choose the Condorcet winner. Notice that here all the other rules discussed would – because of their opposite bias – choose option *c*.¹⁸

An example of a more complex agenda: New Zealand

The two referenda arranged in New Zealand on the electoral reform, in 1992 and 1993, give us a rare example of both the possibilities and the problems connected with the use of more complex voting procedures in direct democracy. (See Bogdanor 1997: 14–44; Levine & Roberts 1993; Nagel 1994; Mackerras 1994; Vowles 1995.) In the first referendum two questions were submitted to the voters: first, whether they wanted to change the existing plurality system or not; second, which of the four possibilities (the mixed-member proportional system, the single transferable vote or STV, the alternative vote, and the supplementary member system) they favored. Voters were allowed to answer the second question even if they had answered "no" to the first question. So, the supporters of the *status quo* had in effect two votes. Because a large majority – 85 % of those who voted – wanted a change, the government arranged a new referendum in which the winner of the first referendum (the mixed-member proportional system) was put against the *status quo* (the plurality system). The former won with 54 % of the votes. The results were as follows:

¹⁸ Further information about the use of counter-initiatives in the USA can be found in Bowler, Donovan & Tolbert 1998: 4, 99, 109–29.

TABLE 8.

1992 referendum		
Part A		
Plurality maintained	15,3	% of votes
Change	84,7	
Part B		
Supplementary member	5,5	
STV	17,4	
Alternative vote	6,6	
Mixed-member	70,5	
Turnout	55,2	% of the electorate
1993 referendum		
Plurality	46,1	
Mixed-member	53,9	
Turnout	85,2	

The procedure used in New Zealand was an interesting hybrid. As compared with the simpler rules, it clearly had some merits. With five options and two rounds, it provided more choice for the voters and gave them an opportunity to express their preferences in a more detailed way. Most notably, it would always choose an absolute winner if one existed, and would never choose an absolute loser. In all the examples discussed above, the New Zealand rule would choose a Condorcet winner.

However, the New Zealand rule also had its defects. Like most referendum-rules operating with more than two choices, it was non-neutral. The supporters of the *status quo* had an opportunity to influence the selection of its challenger, while the *status quo* entered into the second round automatically. In this sense it worked like the parliamentary amendment method. It operated like the plurality runoff in the sense that a Condorcet winner could well be eliminated in the first round. Moreover, the New Zealand procedure violated (weak) monotonicity, and, at least in principle, this made it vulnerable to strategic voting. Because supporters of the *status quo* alternative were allowed to answer the second question in the first referendum, they could vote for the challenger they thought to be the least likely to command wide support among the reformists (Bogdanor 1997: 142).

Several political scientists have questioned both the agenda and the procedure used in the New Zealand referendum. Among the alternatives, there were two truly proportional systems (the mixed-member proportional system and the single transferable vote system), as well as three non-proportional systems. Levine and Roberts (1993: 160) have argued that this could have split support for proportional representation and allowed another – but, in reality, less popular – option through to the second ballot. In other words, these commentators were worried about the possibility that a Condorcet winner could well be eliminated in the first ballot. Some commentators saw the complexity of the referendum arrangement simply as an attempt by the National

Party government to manipulate the agenda (Nagel 1994: 525). According to Vowles (1995: 107-8) ‘the 1993 referendum was therefore to be held in a form significantly loaded against the [mixed-member proportional] option.’

Interestingly, these well-informed commentators took it for granted that the “real” issue was one-dimensional and dichotomous: proportional representation or no proportional representation. In contrast, one enthusiastic supporter of STV has argued that ‘a contest between STV and [plurality rule] would have seen [plurality rule] as heavily defeated on the second round as it actually was on the first round’ (Mackerras 1994: 37). In this interpretation the winning mixed-member system rather than STV was seen as the “divisive” option.

Rules compared

The following table summarizes my findings. I have taken only some well-known criteria into account, especially those related to the majoritarian theory of democracy. For the sake of comparison I have added two rules not used in referenda but extensively discussed in the social choice literature: approval and Borda. The last row in the list (“combined”) is my own proposal; it is explained below.

TABLE 9.

Criteria	AW	AL	M	WN	C
Swiss-1987	1	0	1	0	0
The Haab rule	1	1	1	0	1
California	0	1	1	0	0
Maine	1	0	0	0	0
Washington	1	1	1	0	0
New Zealand	1	1	0	0	0
Plurality	1	0	1	1	0
Runoff	1	1	0	1	0
Approval	0	1	1	1	0
Borda	0	1	1	1	0
“Combined”	1	1	1	1	0

(AW = absolute (first preference) winner chosen; AL = absolute loser (strong Borda paradox) avoided; M = weak monotonicity satisfied; WN = weak neutrality satisfied; C = Condorcet-criterion satisfied.)

A mechanical enumeration does not provide a sufficient justification for or against a decision-rule (Nurmi 2012). Nevertheless, the results may be used as a basis for some speculative remarks. The most important aim of the various referendum methods is to preserve the supposed simplicity or transparency of direct democracy. This is obvious when we compare referendum methods to those used in electing representative

assemblies; the latter (for example, the systems of proportional representation) are sometimes very complex. This search of simplicity is related to what Michael Dummett (1984: 142) has called "the mystique of majorities". For those designing referendum rules it seems to be important that at least at *some* stage, in some counting of votes, the absolute majority criterion becomes relevant. This search for simplicity seriously limits the number of logically available methods. Simplicity is achieved by sacrificing neutrality and/or weak monotonicity. Several referendum methods are non-neutral because they are biased *against* the *status quo*. This is an unexpected and probably unintended consequence of the striving for simplicity. Another unintended consequence is that the chosen rules are highly vulnerable to agenda manipulation. In *all* our examples, we could produce a different winner by deleting a non-winning initiative from the agendas. Of course, most voting rules are subject to agenda manipulation. However, the simplicity requirement makes agenda manipulation particularly easy for it excludes or limits the comparisons of lower preferences.

Conclusion: agenda power in direct and representative democracy

The power over the agenda should be one of the central topics of the normative as well as the empirical theory of democratic government (see Barber 1984: 181; Dahl 1989: 112–14; Hyland 1992: 58). As Barber (1984: 181) says:

'a people that does not set its own agenda, by means of talk and direct political exchange, not only relinquishes a vital power of government but also exposes its remaining powers of deliberation and decision to ongoing subversion. What counts as an "issue" or a "problem" and how such issues or problems are formulated may to a large extent predetermine what decisions are reached.'

Representative democracy is often regarded as paternalistic. Barber (1984: 145) argues that representation "alienates political will at the cost of self-government and autonomy". In one sense, however, representative democracy may appear to be less paternalistic than referendum democracy. In a small group of full time decision makers, votes can be taken as many times as needed. All alternatives that have some popular support may be discussed and voted on. Minorities or individual representatives have the right to make initiatives. Although agendas are often created exogenously, the representatives may have a power to change them. There are, of course, agenda-setting problems in representative legislatures. However, they create normative problems only if the agenda formation processes are systematically biased against some groups; and professional politicians are more likely to detect intended manipulative attempts or unintended ambiguities than ordinary citizens. We can at least say that in a representative democracy, full democratic control of agendas is a less utopian goal than in a direct mass democracy.

However, the lesson of the New Zealand example is that by using methods which allow more choices, agenda power in a direct democracy may be decentralized and the agendas may become more complex. There are numerous unexamined possibilities which could be used to improve the referendum device. For example, any minimally

sensible rule that takes the second preferences of all voters into account would choose a Condorcet-winning alternative in all the examples discussed above (although not, of course, in all possible cases). If we do not want to stick to the majoritarian idea, we could allow voters to rank all the options according to their preferences, and then choose the Borda winner. A compromise would be to count the first preferences, and to apply the Borda criterion only if no absolute majority winner is found. This rule ("Combined" in Table 9) would satisfy all the criteria of our table except the Condorcet criterion.¹⁹ It would not eliminate the possibility of agenda manipulation, but it might at least make it more difficult.

The unavoidable price of using more complex methods in referenda is, however, that the simplicity argument for direct democracy is no more credible. If agendas are sufficiently complex and if the methods used in making decisions take other than first preferences into account, the general problems of social choice are bound to become visible. Thus, although the agenda in the New Zealand referendum was not very complex (two rounds, five alternatives), the basic problems detected by the theory of social choice were seen as relevant. The nature of the agenda was a source of some controversy, and suspicions about conscious manipulation arose.

According to Budge (1993: 153; cf. Budge 1996: 159) 'the attempt to mobilize social choice theory against direct democracy seems to encounter the familiar pitfall of arguing against the possibility of democracy as such, rather than any particular form of it'. This is true in the sense that the impossibility results of the social-choice theory constrain *all* methods of decision-making, in one way or in another. However, different methods are defective in different ways, and, from a democratic point of view, some defects are more serious than others. The fundamental normative consequence of the social choice results is not that "democracy is impossible", but that *there are unavoidable trade-offs between different democratic desiderata*. The problem of agenda power in direct democracy illustrates this. If we try to simplify the nature of democratic choice by reducing the number of choices, we deliver the power to those who do the reducing. If we allow more choices, the voting results may become controversial. Finally, if we employ more complex procedures in order to avoid ambiguities, we lose the intuitive simplicity praised by Budge and others.

The lesson is *not* that the agenda problem should be interpreted as a decisive argument against the use of direct mechanisms. Rather, the conclusions are that the complexity of direct democracy should be openly recognized, and that direct democratic mechanisms should be conceived in the general context of interaction between the representatives and the people rather than as a separate, competing form of democracy. Arguments for the more extensive use of direct democratic mechanisms may be based on the working of the representative institutions. Referenda may, for example, increase the responsiveness and accountability of elected representatives, and bring their policies closer to the voter median. Simply the threat of a referendum may have the effect. Further, referenda may reasonably be used in choosing general principles on which the more specific policies

¹⁹ A similar rule was once used in party primaries in Oklahoma (1924-5). The combined rule is also close to the method once proposed by Duncan Black. Black's rule chooses the Condorcet winner when one exists; otherwise it chooses the Borda winner.

should be built, as in the recent constitutional referendum in Iceland. Finally, they may be used in solving deadlocks within representative institutions. What is common for these applications is that direct democratic mechanisms are not seen as approximations of the ideal of pure democracy, but as possible means to improve the performance of representative democracy evaluated by its own standards.

References

- Ackermann, B. A. (1980). *Social justice in the liberal state*. New Haven: Yale University Press.
- Altman, D. (2011). *Direct democracy worldwide*. Cambridge: Cambridge University Press.
- Barber, B. (1984). *Strong democracy*. Berkeley: University of California Press.
- Bogdanor, V. (1997). *Power and the people*. London: Victor Gollancz.
- Bowler, S., Donovan, T. & Tolbert, C. J. (eds) (1998). *Citizens as legislators. Direct democracy in the United States*. Columbus: Ohio State University Press.
- Budge, I. (1993). Direct democracy: setting appropriate terms of debate. In D. Held (ed.), *Prospects for democracy: North, South, East, West*. Cambridge: Polity Press, 136-155.
- Budge, I. (1996). *The new challenge of direct democracy*. Cambridge: Polity Press.
- Butler, D. & Ranney, A. (eds) (1994). *Referendums around the world*. Basingstoke: Macmillan.
- Dahl, R.A. (1989). *Democracy and its critics*. New Haven: Yale University Press.
- Delley, J.-D. (1978). *L'initiative populaire en Suisse. Mythe et réalité de la démocratie directe*. Lausanne: Editions L'age de Homme.
- Denquin, J.-M. (1976). *Referendum et plebiscite. Essai de théorie générale*. Paris: Librairie générale de droit et jurisprudence.
- Dummett, M. (1984). *Voting Procedures*. Oxford: Oxford University Press.
- Felsenthal, D. S. (2012). Review of paradoxes afflicting procedures for electing a single candidate. In D.S. Felsenthal & M. Macover (eds), *Electoral systems. Paradoxes, assumptions, and procedures*. Heidelberg: Springer, 19-91.
- Guelke, A. (2001). Northern Ireland and island status. In J. McGarry (ed.), *Northern Ireland and the divided world*. Oxford: Oxford University Press, 228-252.
- Higley, J. & MacAllister I. (2002). Elite division and voter confusion: Australian republic referendum in 1999. *European Journal of Political Research* 41(6): 845-861.

- Hyland, J.L. (1995). *Democratic theory. The philosophical foundations*. Manchester: Manchester University Press.
- Kaufmann, E. (1931/2002). On the problem of the people's will. In A.J. Jacobson & B. Schlink (eds), *Weimar: a jurisprudence of crisis*. Berkeley: University of California Press, 196-206.
- Kobach, K.W. (1993). Recent developments in Swiss direct democracy. *Electoral Studies* 12(4): 342-365.
- Kobach, K.W. (1994). Switzerland. In D. Butler & A. Ranney (eds), *Referendums around the world*. Basingstoke: Macmillan, 98-153.
- Levine, S. & Roberts, N. J. (1993). The New Zealand electoral referendum of 1992. *Electoral Studies* 12(2): 158-167.
- Mackerras, M. (1994). Reform of New Zealand's voting system 1985-1996. *Representation* 32(1): 36-40.
- Mackerras, M. & Cotton, J. (2000). Australia. *European Journal of Political Research* 38(3-4): 313-322.
- Mitchell, N. (2002). The 1999 republic referendum: Is there a cycle? *Australian Journal of Political Science* 37(1): 143-52.
- Nagel, J. (1994). What political scientists can learn from the 1993 electoral reform in New Zealand? *PS. Political Science and Politics* 27(3): 525-529.
- Nikolenyi, C. (2011). When electoral reform fails: The stability of proportional representation in post-Communist democracies. *West European Politics* 34(3): 607-625.
- Nurmi, H. (2012). On the relevance of theoretical results to voting system choice. In D.S. Felsenthal & M. Macover (eds), *Electoral systems. Paradoxes, assumptions, and procedures*. Heidelberg: Springer, 255-274.
- Pettit, P. (2003). Deliberative democracy, the discursive dilemma, and republican theory. In J. Fishkin & P. Laslett (eds), *Debating deliberative democracy*. Oxford: Blackwell, 138-162.
- Riker, W. (1982). *Liberalism against populism*. San Francisco: W.H. Freeman & Co.
- Saari, D. G. & van Newenhizen, J. (1988). The problem of indeterminacy in approval, multiple, and truncated voting systems. *Public Choice* 59(1): 101-120.

- Setälä, M. (1999). *Referendums and democratic government*. London: Macmillan Press.
- Skalaban, A. (1998). The mostly-sovereign people. Sophisticated voting and public opinion about term limits in California. *Political Behaviour* 20(1): 35-51.
- Tingsten, H. (1923). *Folkomröstninginstitutet*. Stockholm: Stockholms Universitet.
- Vowles, J. (1995). The politics of electoral reform in New Zealand. *International Political Science Review* 16(1): 95-115.
- Walker, M.C. (2003). *The strategic use of referendums. Power, legitimacy and democracy*. New York: Palgrave.
- Weber, M. (1918/1994). Parliament and government in Germany under a new political order. In M. Weber, *Political writings*. Tr. and ed. P. Lassman & R. Speirs. Cambridge: Cambridge University Press, 130-271.
- Weale, D. (1999). *Democracy*. London: Macmillan.

