Designing an All-Inclusive Democracy: Consensual Voting Procedures for use in Parliaments, Councils and Committees

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Designing an All-Inclusive Democracy is quite a technical work, and to ensure that this review will be of benefit to readers, I will need to begin by explaining some of the technicalities. This will also enable me to identify at the outset the important underlying concerns of the book.

As Peter Emerson himself says, ideally, when there is any disagreement in a democratic community we would hope that the disagreement could be resolved through open public deliberation arriving at a real consensual agreement. Unfortunately that may not be possible in the real world. Disagreement over what is being discussed may still remain and hence, when a decision has to be arrived at, a democratic resolution of the issue will have to involve people expressing their final judgment on what should be done in a vote.

There are, of course, certain widely known criteria governing what an ideally democratic voting procedure should be like; in particular the condition that everybody should have a vote and that everybody's vote should count equally. Many people, however, think that once "one person, one vote, one vote one weight" has been assured, the question of determining what the collective decision should be on the basis of what individual voters have decided is unproblematic. As the American political scientist Robert Dahl put it, what we want to identify is the most preferred option and if everybody's vote is going to count equally the most preferred option is surely the option preferred by most.

This is undoubtedly correct if people are choosing between two and only two options. Things get more complicated, however, when there are more than two options on the table. Theorists of voting argue that in 99.9% of cases where decisions have to be made there will always be more than two options on the table. To illustrate this, consider a debate about the kind of power supply that we should have in the future.

In this kind of situation there is obviously a multiplicity of options. We could stick with our non-renewable fossil fuel policy, hoping that extensive new reserves will be discovered; or we could attempt to switch to fuels that are renewable, such as biomass. Another possibility would be nuclear power, or a completely Green strategy of using permanent sources of natural power such as wind and wave power. Many people might favour a completely mixed strategy including the nuclear option, while others might prefer an *anti*-nuclear mixed strategy. A final possibility might be an anti-nuclear mixed strategy with a policy of massively reducing consumption by changing the way in which we use energy. The first obvious point to make here – and the whole approach of *Designing an All-Inclusive Democracy* is based on this – is that the straight majority rule system of voting cannot be reliably applied. Given that we have identified seven options (and there could be others) it may well turn out to be the case that no option secures a majority of first-preference .votes. So, if we need a definite decision we have to introduce some modification to the rule. A very common modification is to move to what is called a plurality requirement; the system is usually referred to as "first past the post" and is the one used in British general elections and US presidential elections.

Most people are quite familiar with how this simple system works. Voters are given the opportunity to identify just one option (candidate) that they are giving their support to, and the option with the most votes wins, even if the number of votes falls well short of an absolute majority. In fact, in the kind of situation outlined above, a little simple arithmetic would show that any particular power supply option could win with as little as 15% of the vote. The main aim (particularly of Peter Emerson's contribution) of this book *Designing an All-Inclusive Democracy* is to argue that voting systems such as the plurality one can and do result in high levels of *exclusion* from the exercise of political power and that there are alternative systems of voting that are far more inclusive and can empower groups of people otherwise excluded from effective participation.

To explore the issues at stake here and to see just how important they can be from the perspective of democratic equality and justice we can elaborate on the choice of a public policy in the area of power resources.

To make the point starkly, imagine that preferences over the seven options are divided with, as is possible, the pro-nuclear option "winning" with just a 16% share of the vote; the anti-nuclear mixed strategy coming second with 15%; and support for the other options fairly evenly divided below that. In one sense, one could say that the implementation of the nuclear option *was* the democratic choice, because it still satisfies Dahl's criterion – it is the most preferred option on the basis of being preferred by most. But theorists such as Peter Emerson would argue that this conclusion could only be the result of what I would call majoritarian myopia.

To explain this I will go back to our concrete example in which most people do vote for nuclear power as their first preference. Suppose,however, that we were given the following information. When voters are asked which option they would choose as their second preference, outside of the pro-nuclear group the 69% who don't choose the anti-nuclear mixed strategy as their first preference *all* choose it as their second preference. So, while 16% prefer nuclear power first, 84% prefer an anti-nuclear strategy as either their first or second preference. Theorists like Peter Emerson would claim that voting systems like plurality fail in inclusiveness not just by excluding, as in this case, the 84% from final effectiveness in determining the outcome, but also by not including in the determination of strength of support the fact that 71% adopt the anti-nuclear option as their second preference. The situation from the point of view of a justifiable method of determining the strength of preferences for each option might be even worse.

Suppose, as is quite plausible, anyone who thinks a mixed anti-nuclear strategy is either the best or second-best option also thinks that the pure nuclear strategy is the *worst* option. To be a little more explicit then, while 16% prefer nuclear to any other energy source, 84% prefer an anti-nuclear strategy as their first or second choice and the same 84% also think the nuclear option to be the very worst policy. If 84% of voters think the nuclear option to be the worst, how could we possibly say that it is the most preferred? The point can really be hammered home by drawing certain unavoidable logical conclusions from the above figures, namely given that for 84% of voters the nuclear option is ranked last *every single* option would beat the nuclear option in a straight vote. It would seem that if we want to use a voting system that will identify reliably the most preferred option, we need one other than the plurality system.

I have developed the arguments at some length, not just because they identify the basis for the general approach to voting taken by Peter Emerson in this book, but specifically because it was precisely these considerations that led Jean-Charles de Borda, a member of the French Academy of Sciences in the 18th century, to design a voting system, now more usually referred to as the Borda Count, which is *the* basis for Peter Emerson's "All-Inclusive Democracy". The principles and operation of the Borda Count are easily explained, even to those who may have never previously encountered it. Voters are presented with a ballot paper listing a number of options; in our example, all seven options would appear. They are then able to identify their most preferred option, their next most preferred option, and so on down to each person's least preferred. Points are then assigned according to the following rule (in Peter Emerson's strict Borda Count): a first-preference vote from one voter would give that option 7 points, a second preference 6 points and so on. The points are then added and the option with the highest points is the winner.

Peter Emerson, along with those other contributors to this book who more or less openly support him – Christine Bell, Phil Kearney, Aileen Tierney and Elizabeth Mahon – believes that Borda Count voting systems are more "inclusive" in several senses. Firstly, *all* preferences of *all* voters go into the determining of the Borda scores of each of the options. Secondly, while not everyone is guaranteed to contribute to the selection of an option for which they have some positive preference, Borda Count systems do, on the whole, maximise the likelihood of people achieving some level of effectiveness, so that more people are included in the determination of the option that is selected. In our example, the plurality vote "includes" only 16% in the determination of the outcome, whereas the Borda Count, which would select the anti-nuclear mixed strategy, would give some effectiveness to 84% of people.

It is worth pointing out that this is an instance of where the votes of the pro-nuclear group go into determining the Borda scores,but given that they would probably think the explicitly anti-nuclear option the worst, they don't get anything of what they want. No system can be literally "All-inclusive", in the sense of giving actually equal effectiveness to all minorities. The third type of inclusiveness is rather less strongly based. The argument is that not only do Borda Count systems tend to select options with relatively wide (inclusive) support, they might lead to people thinking in terms of what would secure higher consensus support, rather than in a majoritarian winner-takes-all fashion. Such a consequence, of course, depends upon the specifics of social-psychological motivation, which is not subject to mathematical predictability. It is a possibility, course, that as people become familiar with Borda Count systems, that familiarity might prove an antidote to majoritarian myopia.

The book itself falls into three main parts. Part I and the conclusion are the work of the editor, with Professor Elizabeth Meehan collaborating on the conclusion. In particular, Chapters 1 to 4 examine the detailed workings of various adaptations of the Borda Count recommended by Peter Emerson in different contexts. A really lucid account of these adaptations and a critical assessment of them are provided by Hannu Nurmi in Chapter 6, which I recommend highly. The other chapters in Part II offer interesting reflections on Peter Emerson's substantive contribution. Finally, there are appendices and a glossary that go into more technical detail. I will return to the glossary shortly.

One of the main adaptations in the present book of the original Borda Count is what is referred to as the Modified Borda Count. This is quite central in that it is one important aspect of the voting systems proposed by Peter Emerson from which he hopes a move towards consensus voting might occur. But it is a modification of the original system that could be considered problematic. The modification concerns how points are awarded on the basis of preferences in the case of incomplete ballot forms.

As outlined above, in the case of a complete ballot, the number of points for a first preference equals the number of options on the agenda – 7 points for a first preference if the number of options is 7. But suppose that someone only indicates, say, a first and second preference, leaving the rest of the ballot form blank. In the original version a first preference would still get 7 points, the second preference 6 points in our example. In the modified system, referred to as Modified Borda Count, the number of points depends on the number of options voted on. So a person voting on only 2 options has a first preference that scores only 2 points. In the extreme case of a person only indicating a first preference, that first preference scores only one point.

Hannu Nurmi, in the chapter referred to above, discusses some of the consequences of this modification, but it seems to me to raise serious questions about the basic political equality of peoples' vote. Suppose we go back to our power policy example and suppose that some particular supporter of, say, the nuclear energy option really thought that all the other options were equally worthless. The natural way for that person to vote would be to choose nuclear energy as first preference and to leave the rest of the ballot paper blank. But that would mean that in terms of contributing to the victory of the option the voter thinks best, that voter's first preference counts *seven times less* than the first preference of someone who enters a complete ballot. The rationale of those who support the Modified Borda Count is that it encourages people to submit a complete ballot so as to maximise the support that they can give to their first preference, and that might encourage people to begin to think consensually. But it might encourage people to fill out the rest of their ballot randomly; and even if the admirable intent was to encourage a move towards consensus thinking, what seems to me undeniable is that this is done by seriously deviating from the strict political equality of voters.

The final substantive point that I want to make has to do with the glossary, which contains explanations of some one hundred and twenty or so technical terms. The explanations are clear and, in general, extremely useful for anyone struggling with the technical analysis of voting and electoral systems. There is, however, one confusion that has important implications for Borda Count systems. This may sound a little esoteric and I will have to use slightly more mathematics than I have used previously. But the issue raised is of central importance to any approach to voting that prioritises Borda Count-type systems, as Peter Emerson does.

Since the work of Kenneth Arrow in the late 1950s, it has been known that the Borda Count can infringe one of Arrow's basic conditions for an acceptable voting system, the condition known as the Independence of Irrelevant Alternatives. Arrow assumed that the collective social ranking of two alternatives, say A and B, should be based *only* on the way individual voters ranked A and B and not on how anyone ranked other alternatives, say C and D, with respect to each other or with respect to A and B. In Arrow's work those other alternatives are irrelevant. Peter Emerson argues, specifically on page 91, that this problem can be easily dealt with. But this depends upon his defining "irrelevant" in a way different from Arrow's definition. In the glossary, an alternative is defined as irrelevant if literally everyone prefers some other alternative to it. Of course, an irrelevant alternative in this sense can be harmlessly eliminated from an agenda. But, as the following example will show, an alternative can generate an Arrow-type anomaly without being irrelevant in Peter Emerson's sense. And so it can't be dealt with in the same harmless way.

This may seem a little obscure as yet, but here is what is at issue. Suppose there are just two options on an agenda, A and B. A hundred voters rank the options:

52	48
A	B
B	A

If we compute the Borda scores using Peter Emerson's system for full ballots we get:

A = first preferences, 2 points multiplied by 52 = 104
Second preferences, 1 point multiplied by 48 = 48
A's Borda score = 104 + 48 = 152

B = first preferences, 2 points multiplied by 48 = 96
Second preferences, 1 point multiplied by 52 = 52
B's Borda score = 96 + 52 = 148

Here A beats B by 152 to 148.

Suppose now that we produceintroduce another option, C, onto the agenda, with the resulting support for the three options being:

52	46	2
A	B	C
B	C	B
C	A	A

Note that no individual voter changes the rank order of A and B. ifIf we re-compute the Borda scores for A and B, however, the following occurs:

A = first preferences, 3 points multiplied by 52 = 156
Second preferences, 2 points multiplied by 0 = 0
Third preferences, 1 point multiplied by 48 = 48
A's Borda score = 156 +0 + 48 = 204

B = first preferences, 3 points multiplied by 46 = 138
Second preferences, 2 points multiplied by 54 = 108
Third preferences, 1 point multiplied by 0 = 0
B's Borda score = 138 +108 + 0 = 246

Hence B now beats A by a very comfortable 246 to 204, despite the fact that no individual voters had changed their minds regarding the ordering of A and B. in In Arrow's sense, C is an irrelevant alternative and, in this case, produces a puzzling social rank reversal; but C is not irrelevant in Peter Emerson's sense; there is no other alternative which literally everyone prefers to C. In fact, C is some voters' first choice.

I happen to believe myself that the anomalousness of the infringement of Arrow's condition is not as obvious as Arrow assumes, a matter alluded to in the chapter written by Maurice Salles, but not fully developed. It is, however, an issue that cannot be defined out of existence by re-defining irrelevance to make it harmless. It is one of those areas that demands more research.

In this review I have kept the mathematical illustrations and arguments very simple. But a full assessment of the detailed proposals put forward by Peter Emerson could not afford to neglect the complex technical details that have to be investigated. Consequently, the book is not easy to read. The difficulties, however, have to be faced up to. The issues at stake here are of central normative importance. Unthinking majoritarianism has been implicated in great deviations from democratic political equality, the perpetuation of major social injustices and, as Peter Emerson points out, in extreme cases civil war and genocide. And I want to end this review by saying that I thoroughly applaud any work such as *Designing an All-Inclusive Democracy* that treats these issues with the seriousness that they deserve.