

Majority voting can be a catalyst for populism. What can be done about it?

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Peter Emerson's recent book is entitled *Majority Voting as a Catalyst of Populism: preferential decision-making for an inclusive democracy* (Emerson 2020). The cases that concern him most are those where there is a (perhaps linguistic, ethnic, and/or religious) majority that can ride roughshod over its minority/ies in a majority (better, 'plurality') electoral system. He has an all-purpose solution. This note considers the problem and compares Emerson's solution with others.

Emerson is hugely energetic. He reminds me of Ramon Llull. That great pioneer of voting theory (c1232-1315) had one big idea, which he called his 'Art'. He was the first mathematician in the West to use what we now call combinatorics, and possibly the first to use algebraic notation. He drew up a vote matrix for exhaustive pairwise comparison of candidates, about 600 years before Lewis Carroll (C.L. Dodgson) was previously thought to have pioneered the idea. Llull thought that his Art could solve any problem, mathematical or theological. He believed that he could prove that Christianity was true, and that Judaism and Islam were false. Living on the Balearic islands, then at the frontier of Christian and Muslim settlement, he made many missionary journeys in vain attempts to persuade rulers and scholars of both religions that his Art was correct. Perhaps remarkably, he lived until his 80s and died of natural causes (McLean and London 1990; Hägele and Pukelsheim 2001; for Dodgson's matrix, see Black 1958).

The analogy is far from complete. Emerson does not profess any theology in this book. But he travels with the same intrepid enthusiasm as Llull. For over thirty years his journeys have taken him to observe elections and society in a remarkable number of countries, including Russia, China, and most remarkably of all, North Korea. In many of them (though not North Korea), he has acted as an electoral systems consultant. Coming from Northern Ireland, a divided society which has suffered from the tyranny of the majority, his insights and expertise have been most in demand in parts of the world with similar issues, including the Balkans and the Caucasus. He too has survived to write this book.

Like Llull, he has one big idea. Llull's big idea was to find the majority winner by pairwise comparison. Emerson's big idea is to seek consensus rather than majority. The tyranny of the majority is most pernicious in a divided society. In Northern Ireland, majoritarian elections since 1920 have always delivered dominance to the Unionist (Protestant) majority and

nothing for the Nationalist minority. Elections to the UK Parliament are majoritarian (a better label would be ‘pluralitarian’). Each single-member district, in a UK Parliament election, goes to the plurality winner. Therefore, Unionists have always won the majority of Northern Ireland seats at Westminster. Usually, this has no consequences for the balance of power in the UK Parliament, but 2017-19 the Unionists held the balance of power and demanded favours for Northern Ireland as their price for supporting the government.

Only proportional elections have given Nationalists any share of power. These were mandated by the Government of Ireland Act 1920 that created Northern Ireland. But a Unionist government there abolished them in 1929 and the UK Government did not intervene. Various power-sharing agreements were tried and failed from the 1970s to the 1990s. However, since the Good Friday (Belfast) Agreement of 1998, Nationalists are guaranteed a share of power. Elections to the Northern Ireland Assembly are by the (roughly) proportional Single Transferable Vote (STV) system. In government, the First Minister and Deputy First Minister must be from the two parties with the largest vote shares. Since 1998, this has always meant, as it was designed to, that the First Minister would be from one community and the Deputy First Minister from the other. As, currently, there are more (cultural) Protestants/unionists than (cultural) Catholics/nationalists, this has since 1998 involved a First Minister from one of the unionist parties and a Deputy from one of the nationalist parties. Furthermore, some policies must explicitly gain cross-community consent; and a faction may issue a ‘petition of concern’, which may trigger a requirement for majorities from representatives of both communities.¹ But power-sharing has not always gone smoothly, and the power-sharing government has been suspended for long periods of time. The supermajority requirement of the petition of concern procedure can lead to gridlock.

A similar story can be told of many other societies divided by ethnicity or religion, including several of those where Emerson has observed or consulted. The tyranny of the majority (plurality) can be avoided if designers of election systems and voting procedures drop majority rule in favour of something that encourages consensus. Many scholars and electoral reformers share this perspective. It lies behind the idea of proportional representation as developed independently by numerous 19th-century reformers. It also lies behind the idea of consociation – most associated with the Dutch-American political scientist Arend Lijphart.

¹ Petition of Concern: A notice signed by at least 30 MLAs and presented to the Speaker. It usually expresses concern about a motion before the Assembly. If the Speaker rules that the petition of concern should apply to a motion, the vote will require cross-community support. Source: https://education.niassembly.gov.uk/post_16/glossary#mr, accessed 17.11.2020.

The institutions of post-1998 Northern Ireland are designed to be consociational: that is, to ensure the consent of representatives of both the majority and the minority community there. But consociationalism has known flaws. One, as noted above, is risk of gridlock. Another is that it tends to force voters and parties to identify with one or another community, and therefore to freeze sectarianism into the system.

Can Emerson's plan do better? What distinguishes his perspective from those of, say, Lijphart, Thomas Hare, or John Stuart Mill? He runs the *de Borda Institute*, a think-tank in Northern Ireland that promotes the *Borda rule* and some variants of it. The Borda rule is familiar to most readers of this article. It was proposed by Jean-Charles de Borda (1733-99) in 1784. Unknown to him, it had been proposed by Nicholas Cusanus in the 1430s (McLean and Urken 1995: 77-8). Stated generally, it is a ranking rule. Each voter assigns a points to a last place and an increment of b ($b > 0$) for each place above the last. In practice a is usually taken as 1 and b as 1. However, it is better to take $a = 0$ and $b = 1$. Borda gives the reason in his original paper (translated in McLean and Urken 1995: 83-9). With $a = 0$ and $b = 1$, the Borda score of each candidate represents exactly the number of times she beats each other candidate in an exhaustive tournament of pairwise comparisons. This shows both the affinity and the difference between the Borda rule and the Condorcet rule ('select the candidate, if one exists, who beats each of the others in an exhaustive pairwise tournament'). The Borda and Condorcet rules are the only normatively defensible extensions of the idea of 'majority rule' to the case of more than two candidates or options. Unfortunately, they do not always produce the same winner.

The Borda rule is very easy to understand if you have heard of the Eurovision Song Contest (although they use an inferior variant). As Emerson rightly insists, it places a premium on compromise. A candidate who can garner widespread support, e.g., from multiple ethnic or religious groups, will tend to do better under Borda than under plurality rule. A candidate who juices up the base at the expense of everybody else will do better under plurality rule, if the base is big enough. So why is the case for Borda not universally accepted? The Wikipedia entry for *Borda Count* (accessed on 17.11.2020) records that it is used, *inter alia*, to elect officers of the Faculty Senate at Southern Illinois University at Carbondale, and for members of Research Area Committees of the US Wheat and Barley Scab Initiative. These are worthy achievements, but not world-shattering ones.

There are some minor objections to the Borda rule and one (I believe) overwhelming one. Borda designed his count to elect a single winner. It can be adapted to elect members in a multi-member district. For this, Emerson recommends the Quota Borda system first proposed by Dummett (1984, 1997). Is it then demonstrably better than, e.g., STV? I don't think so, for a reason to be given shortly.

Secondly, the Borda count as originally proposed does not allow for tied rankings or short ballots (ballots where the voter fails to rank some of the candidates). Here I agree with Emerson that his Modified Borda Count (MBC) is a distinct improvement. A voter who wishes to rank only m out of the n options ($m < n$) scores them at $m - 1, m - 2, \dots, 0$ rather than giving $n - 1$ to her top score and tying the unranked options at the bottom of her list. The MBC breaks the link between the Borda and Condorcet rules identified by Borda in 1784. But it aligns incentives appropriately, alerting the potential short-ballot voter that her top preference will not carry the same score as the top preference of a voter who runs through the whole ticket.

The big problem of Borda is its manipulability. 'My election method is only for honest men', said Borda plaintively when its weaknesses were first uncovered (quoted in McLean and Urken 1995: 40). It had been applied to the election of fellows of the Paris *Académie royale des sciences*. Borda was an academician; Condorcet was the secretary of the academy. Electors quickly discovered the 'most dangerous rival' strategy. Who is the most dangerous rival to my favourite candidate? Very well, rank that candidate last, with a Borda score of 0. Stuff everyone else in between, even if you have a low, or no, opinion of them.

This shows why the Borda scheme's violation of *Independence of Irrelevant Alternatives* matters. As many readers know, Arrow's (1951) celebrated Impossibility theorem proves that the following are incompatible in any social welfare function (that is, any mapping from individual rankings to a social ranking):

- Universal domain (the mapping works for every permutation of individual rankings);
- Weak Pareto condition (if everybody ranks some x above some y , the mapping does not rank y above x)
- Independence of Irrelevant Alternatives (IIA): the social ranking of x and y is a function only of individuals' rankings of x vis-à-vis y , and is invariant to changes in voters' rankings of $a, b, \dots, j, \dots, z$)

- nonDictatorship: there is no individual whose rankings automatically map to the social ranking regardless of other individuals' rankings.

The Borda count violates either IIA as defined by Arrow or a closely related independence condition proposed by Radner and Marschak (1954: 63; McLean 1995). And it is this violation that makes it so easily manipulable. Under any Borda system, it is easy to do down some candidate by elevating others – in other words, by not reporting one's sincere preference ordering. Another impossibility theorem, due (independently) to Gibbard (1973) and Satterthwaite (1975), states that every determinate voting rule over more than two alternatives is either dictatorial or manipulable. The Borda rule is manipulable; so is plurality rule; so is STV. But manipulating Borda (and plurality) is easy; manipulating STV is more difficult. For that rough-and-ready reason, I do not agree with Emerson that the Quota Borda rule should replace STV in places like Northern Ireland.

There is another route out of the Arrow and Gibbard-Satterthwaite impossibility results, and it is one that might appeal to Emerson. I begin with a system he discusses and does not like very much, Approval Voting (here labelled AppV to distinguish it from Alternative Vote, AV, aka Instant Runoff. As Emerson says, AV is a terrible system that should not be given the time of day).

Under Approval Voting each voter divides the candidates into two classes: Approved and Not Approved (Brams and Fishburn 1978). If a single winner is required, it is the candidate with the most Approve votes. It can be adapted for multi-candidate elections by taking Approvals in descending order until all places have been filled. Like the Borda count, AppV tends to favour compromise candidates and to disfavour base-juicing candidates. It is less manipulable. And it may be regarded as a special case of a procedure that Emerson does not discuss, but which he might find promising: the *Balinski-Laraki procedure* (hereafter B-L), which they label Majority Judgment (Balinski and Laraki 2010). Although the title says it is majoritarian, it avoids the pathologies that worry Emerson. It is a system of *grading*, not *ranking*. It assumes that each voter has a standard in mind – in their examples they use the verbal grades of the French school examination system *Excellent*, *Very Good*, *Good*, *Acceptable*, *Poor* and *Reject*. Whereas a ranking system like Borda uses relative scores, the B-L system uses absolute grades. Voters are asked to make a judgment, not express a preference. And the system is majoritarian in a very precise sense: it depends on the *median judgment*. The median judge is the one with exactly as many judges above her as below her.

In a mass election (with, for convenience, an odd number of voters), the median grade of each candidate is the one returned by the median voter. If the median grade of a candidate is, say, *Good*, then we know that a majority of voters think she is not better than *Good*; and a majority think she is not worse than *Good*. Because it is a grading rather than a ranking system, it sidesteps Arrow and Gibbard-Satterthwaite. Because it takes the median grade, it favours compromise for similar reasons to Borda, but with less scope for manipulation.

The Borda rule was proposed for elections to a scientific academy. One present-day academy, the British Academy, uses a hybrid of Borda and Balinski-Laraki for the election of new academicians. Voters must offer both a ranking (Borda) and a grading (B-L) of the candidates. When these produce different results, the matter has to be settled by discussion. This is appropriate for a deliberative forum, such as a Citizens' Assembly. These have had a few successes recently. In the Republic of Ireland, a Citizens' Assembly, comprising 99 randomly-selected citizens, proposed legalising of abortion. As Emerson notes, the Assembly's voting procedures were suspect. But it managed a full discussion of various steps towards legalising abortion compared to the absolute ban then contained in the constitution's 8th Amendment. The outcome was a recommendation to repeal the amendment and allow the Oireachtas (parliament) to regulate abortion. This has now happened. An explicit use of either Borda or B-L might have made the process smoother, but deliberative assemblies or citizen juries are a potentially promising solution to the dilemmas Emerson considers.

A final thought, staying in Ireland. Same-sex marriage is now legal in both jurisdictions (the Republic of Ireland and Northern Ireland). In the Republic, the proposal emanated from a constitutional convention (a precursor of the Citizen's Assembly), was carried in a referendum in 2015, and subsequently enacted. In Northern Ireland, a proposal to permit same-sex marriage, which was already legal in the rest of the UK, was carried in the Assembly, at the fifth attempt, in 2015. However, the largest party, the Democratic Unionist Party (DUP), raised a petition of concern (see above) against it. If the Assembly had not been suspended in 2017 over other matters, that would predictably have blocked it indefinitely. However, while Northern Ireland was under direct rule from Westminster and after the DUP lost its balance-of-power status in the UK Parliament, it was enacted there and came into force in early 2020. Public opinion in both countries (as elsewhere in Western democracies) has changed very fast, and there was a popular majority in favour of same-sex marriage in both parts of Ireland despite church opposition. The consensual institutions of the Republic

allowed it to happen. The consociational arrangements of Northern Ireland would have prevented it from happening if the Assembly had not been suspended. Perhaps this shows that institutions for consensus are necessary, but not all such institutions are equally good at bringing it about. Emerson is right as to ends, but he is too much wedded to a particular means of bring desired ends about.

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