approval voting

[Abstract: In a single-winner voting system, approval voting gives voters the possibility to cast a ballot for (or ‘approve of’) as many candidates as they wish - that is, voters are freed from the constraint of voting for only one candidate. The candidate receiving the greatest total number of votes is declared the winner. Approval voting has several compelling advantages over other voting procedures, and has been used by various governments and organizations around the world.]

Robert J. Weber coined the term ‘approval voting’ to describe an election system in which each voter is allowed to vote for as many candidates as they wish – that is, voters can ‘approve of’ all the candidates deemed ‘acceptable’, and the candidate receiving the greatest total number of votes is declared the winner.

Scholarly analyses of this voting system began in the 1970s, with the works by Steven Brams, Peter Fishburn and Robert J. Weber (Brams and Fishburn, 1978, 1983, 2007; Weber, 1995), and led to an outburst of research that is still ongoing today. Their germinal motivation lies in some of the weaknesses of the plurality (or first-past-the-post) voting system, in which voters can vote for only one candidate and the candidate with the most votes wins.

Issues with plurality voting

We can readily identify three issues with plurality voting. First, a group of people may be a minority and yet represent a plurality. Minority candidates who would lose a one-to-one electoral contest may thus win the election. Second, to prevent such an outcome, voters may need to adopt an insincere strategy, and concentrate their ballots on a strong contender instead of their preferred candidate. (In this system, voting is ‘sincere’ if voters cast their ballot for their preferred candidate.) Strategic mistakes may then lead to ‘wrong’ electoral outcomes: voters may fail to coordinate on the right candidate. Third, candidates have an incentive to design their platform so as to be very strong in some subgroups of the population, instead of trying to reach wider consensus.

Some properties of approval voting

Under approval voting (AV), a ‘sincere’ voting strategy can be summarized by the ‘worst’ candidate that the voter wants to approve of. That is, each voter decides of a cutoff that divides acceptable candidates from unacceptable ones. All the candidates above the cutoff are then approved of.

A common concern is that voters who are almost indifferent between several candidates may find many of them acceptable. However, they cannot exert more voting power than someone who finds only one candidate acceptable. First, each voter can only cast one single ballot for a given candidate. Second, voting for many candidates actually dilutes the voter’s ballot: approving of all candidates is equivalent to abstaining.

Brams and Fishburn (2005) highlight six important advantages of AV:

* It gives voters more flexible options: beyond what they can do under plurality, voters can also vote for additional candidates.
* It helps elect the strongest candidate: candidates who attract a broad consensus will be approved of by more voters.
* It reduces negative campaigning: candidates have an incentive to broaden their appeal to reach for the approval of voters who have a different first choice.
* It increases voter turnout: being better able to express their preferences, voters are more likely to vote.
* It will give minority candidates their proper due. Minority candidates receive their true level of support under AV: supporters of a minority candidate need not abandon their preferred candidate to lend support to stronger candidates.
* It is eminently practicable: it is simple for voters to understand and use. (Several experiments were run to verify that voters do indeed understand how to behave under such an electoral system. See for instance Laslier and Vander Straeten, 2008.) It can also readily be implemented on existing voting machines.
Controversies

The initial perception that AV produces sharp predictions has been questioned by subsequent research. Saari and van Newenhizen (1988) show that the multiplicity of ‘sincere’ strategies generates a problem of outcome indeterminacy. Niemi (1984) shows that it ‘almost begs voters to behave strategically’. Using the ‘natural experiment’ of the US Electoral College in 1800, Nagel (2007) argues that these strategic considerations may often produce tied outcomes. Yet Myerson and Weber (1993) show that Condorcet winners must always be among the likely winners.

Applications

While scholarly analyses of AV started in the 1970s, electoral systems in which voters can cast either a single or a multiple ballot had been used previously. For instance, the US Electoral College, used AV between 1788 and 1800 (Nagel, 2007). In a more distant past, related rules have been used in Venice (Lines 1986) and in papal elections (Colomer and McLean, 1998). In those instances, AV was not maintained, partly because the technology to count votes was still primitive. Counting more than one vote per elector was thus costly. In addition, the size of the electorate was relatively small, which in AV heightens the incentives of strategic manipulation. The fruits of AV can indeed be expected to be most ripe when the size of the electorate is sufficiently large: strategic manipulations by one voter are then less likely to influence the outcome.

The outburst of academic research and the proven desirable properties of AV led several scientific societies to adopt it for their internal elections (Brams and Fishburn, 2005). In the former Soviet Union, many elections involved a similar system. It is also used to organize referenda in some US states, and to elect the secretary-general of the United Nations.

Enriqueta Aragones and Micael Castanheira

See also strategic voting; voting paradoxes

Bibliography


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