

Modified At-Large Voting Systems

A voting system translates people's votes into seats in a legislative assembly. Many different voting systems exist. Because the same votes in different systems can produce different results, the selection of a voting system has a powerful impact on governance and fair representation.

Modified at-large voting systems are one-person-one-vote systems in which far more than 50% of voters elect candidates of their choice. To provide greater electoral fairness, candidates are elected at-large or in multi-member districts, but without using winner-take-all methods common in the United States. These systems provide more electoral fairness than "winner-take-all" elections.

Nearly all democracies use versions of these systems. The following three modified at-large systems are used in some local elections in the United States. Preference voting (see page two) is the system most likely to provide fairness both to minority and majority populations, to promote competition and to encourage positive campaigning.

✓ Limited Voting

In limited voting, voters either cast fewer votes than the number of seats or parties nominate fewer candidates than there are seats. The greater the difference between the number of seats and the number of votes, the greater the opportunities for fair representation. Versions of limited voting are used in Washington, D.C., Philadelphia (PA), Hartford (CT) and many small jurisdictions around the United States. It has been used successfully to resolve Voting Rights Act cases.

Example: In a race to elect five candidates, voters might have only two votes. Winning candidates are determined by a simple plurality (whichever five candidates get the most votes).

✓ Cumulative Voting

In cumulative voting, voters cast as many votes as there are seats. But unlike winner-take-all systems, voters are not limited to one vote per candidate. Instead, they can concentrate their votes on one or more candidates. Voting rights scholar Lani Guinier has promoted cumulative voting as a colorblind means to provide fair minority representation.

Perhaps the simplest version of cumulative voting is to allow voters to vote for up to as many candidates as there are seats (as with winner-take-all), then allocate votes equally among the candidates selected by the voter. In a five seat race, voters selecting two candidates thus would provide each candidate with 2.5 votes.

Cumulative voting was used to elect the Illinois state legislature from 1870 to 1980. In recent years it has been used to resolve voting rights cases for city council elections in Alamogordo (NM) and Peoria (IL), for county commission elections in Chilton County (AL) and for school board elections in Lovington (NM) and Sisseton (SD); in every case a member from the protected minority was elected following the implementation of cumulative voting. Cumulative voting in 1994 was imposed by a federal judge in a Maryland voting rights case.

Example: In a race to elect five candidates, voters cast one vote for five candidates, five votes for one candidate or a combination in between. Candidates win by a simple plurality of votes.

✓ Preference Voting

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Preference voting (also called the "single transferable vote") is a form of limited voting in which voters maximize their one vote's effectiveness through ranking preferences. Preference voting is nearly guaranteed to provide fair results, can be used in both partisan and non-partisan elections and does not require primaries. It is recommended as the best system for local government elections.

To vote, voters simply rank candidates in order of preference, putting a "1" by their first choice, a "2" by their second choice and so on. Voters can rank as few or as many candidates as they wish, knowing that a lower choice will never count against the chances of a higher choice.

To determine winners, the number of votes necessary for a candidate to earn office is established based on a formula using the numbers of seats and ballots: one more than $1/(\# \text{ of seats} + 1)$. In a race to elect three seats, the winning threshold would be one more than 25% of the total vote -- a total that would be mathematically impossible for four candidates to reach.

After counting first choices, candidates with the winning threshold are elected. To avoid wasting votes, "surplus" ballots beyond the threshold are transferred to the remaining candidates according to voters' preferences (in the best method, every ballot is transferred at a reduced value). When no candidate wins, the candidate with the fewest votes is eliminated, and all his/her ballots are distributed among remaining candidates according to voters' preferences listed on ballots. This process continues until all seats are filled. Computer programs can be used to conduct the count.

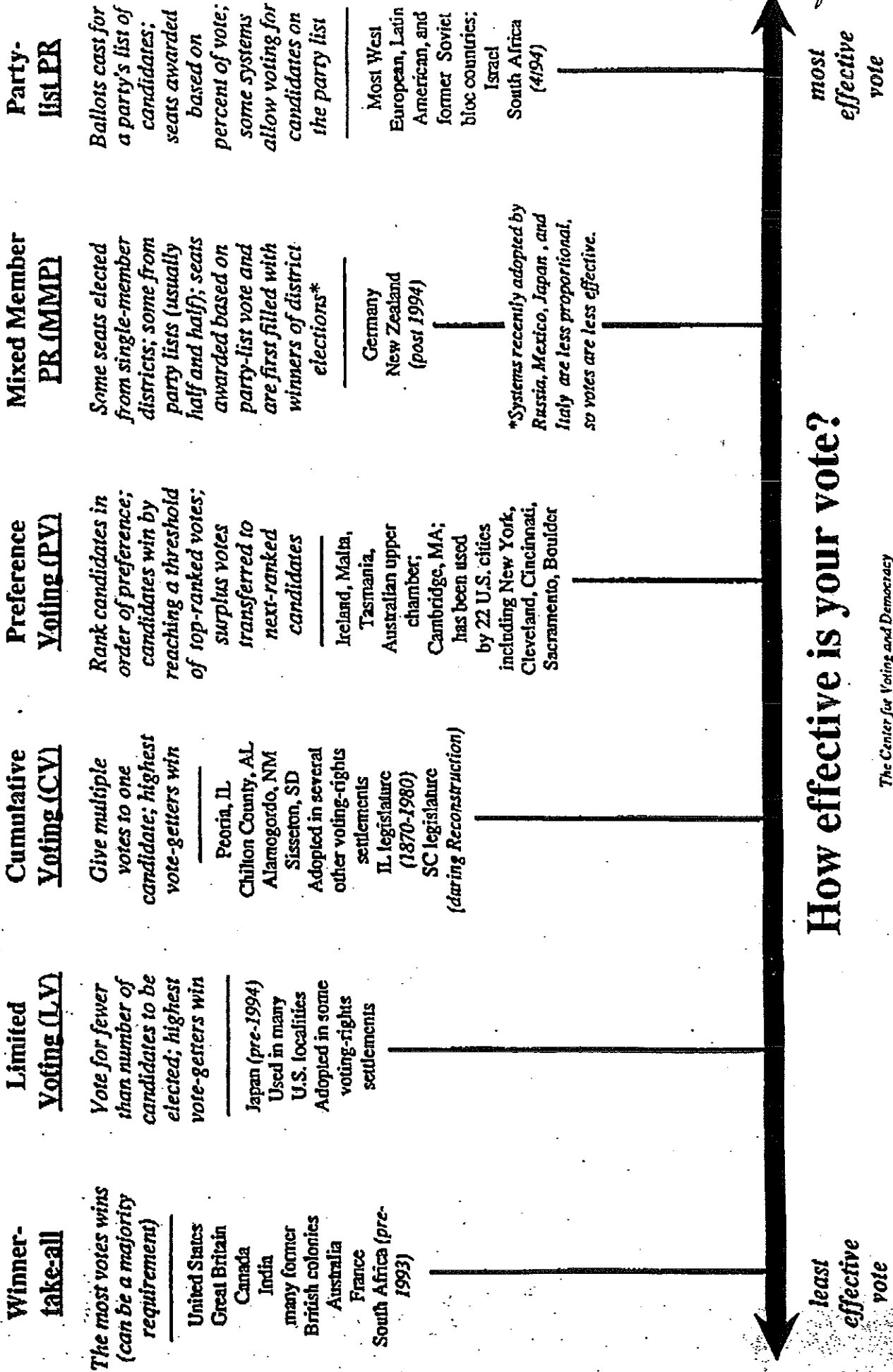
Preference voting is used for city council elections in Cambridge (MA) since 1941, for Community School Board elections in New York and for national elections in Ireland and Australia. Cambridge's 13% African-American community has had continuous representation since the 1950s; in the past preference voting in other cities -- like New York in the LaGuardia era -- also resulted in fair racial, ethnic and partisan representation.

Example: The chart below illustrates preference voting in a partisan race with 6 candidates running for 3 seats: Jones, Brown and Jackson are Democrat; Charles, Murphy and Stevens are Republican. With 1000 voters, the threshold of votes needed to win election is $251 = (1000/4) + 1$.

<u>Candidate</u>	<u>1st Count</u> <i>Jones wins</i>	<u>2nd Count</u> <i>Jones' surplus transferred</i>	<u>3rd Count</u> <i>Smith's votes transferred</i>	<u>4th Count</u> <i>Jackson's votes transferred</i>	<u>5th Count</u> <i>Brown's surplus transferred</i>
Brown	175	+10 = 185	+ 10 = 195	+150 = 345✓	- 96 = 251
Jones	270✓	-19 = 251			
Jackson	155	+ 6 = 161	+ 6 = 167	-167 = 0	
Charles	130	+ 2 = 132	+ 75 = 207	+ 14 = 221	+ 44 = 265✓
Murphy	150	+ 0 = 150	+ 30 = 180	+ 3 = 183	+ 5 = 188
Smith	120	+ 1 = 121	-121 = 0		

Democrats Brown and Jones and Republican Charles win, with over 75% of voters helping to elect a candidate. With 60% of first choice votes, Democrats almost certainly would have won three seats with a winner-take-all, at-large system. (They also would have won three seats with a limited vote system -- and likely with cumulative voting -- because of "split votes" among the Republicans.) Murphy loses to Charles due to being a polarizing, one-dimensional candidate.

Voting Methods around the World



How effective is your vote?

VOTING SYSTEMS, THE VOTING RIGHTS ACT AND POLITICAL VITALITY

	Preference <u>Voting</u>	Limited <u>Voting</u>	Cumulative <u>Voting</u>	Single-Member <u>Districts</u>	Winner-Take-All <u>At-Large</u>
Promotes fair racial/ethnic representation?	Yes	?	Yes*	?	No
Ensures majority rule?	Yes	No	No	No	No
Promotes fair representation of women?	Yes	?	Yes*	No	?
Easy for voters?	Yes*	Yes	?	Yes	Yes
Fosters voter participation	Yes	Yes*	Yes*	No	?
Lessens negative campaigning?	Yes	?	No	No	?

* probably true, but uncertain or susceptible to change over time