### PR requires a meaningful ``proportion'' : Why *Approval Voting* should replace plurality voting to determine proportion in a PR system.

Submission to the Citizen's Assembly on Electoral Reform

#### Marcello M. Pavan, Ph.D.

9-63 Keefer Place, Vancouver, B.C. V6B-6N6

604 868 7466

### Abstract:

The Citizen's Assembly on Electoral Reform was formed to recommend an improved voting system for British Columbia. To date, it appears that some form of *proportional representation* (PR) is most favoured, either in a relatively ``pure" or a ``mixed" form. In order for PR to have its intended benefts, a meaningful definition of ``proportion" is absolutely essential. This submission argues that *under no circumstances should the present* ``*plurality" balloting scheme be used to determine proportion*, as often implicitly assumed for ``mixed-PR" systems. Numerous methods exist to determine ``proportion" in various PR schemes (*e.g.* ranked ballots), but *if technical simplicity is desired, then at the very least Approval Voting (AV) should be used in place of the present single-choice plurality voting (SCPV) system*.

In SCPV, each voter is constrained to only a single choice on the ballot, and this results in many well-documented theoretical (by political scientists) and well-understood practical (by the electorate) deficiencies. In particular, lesser-of-two-evils choices, and strategic voting distorts the ``true support" of a party. *Consequently, the fraction of votes a party receives in a SCPV election is not an accurate measure of its true support among the electorate*. Plurality does sport technical simplicity, *i.e.* counting votes and deciding a winner, and is familiar, so despite the distortions, it is almost always used to discuss ``support proportion", even in PR systems. But there is a voting scheme as technically simple as plurality, but with a much more meaningful measure of a party's true support: Approval Voting. In Approval Voting (AV), on an otherwise normal plurality-like ballot, a voter selects one *or more* candidates that they ``approve of'' or ``support". Freeing the electorate to select all the candidates that they approve of to represent them removes the need to vote strategically or for the ``lesser of two evils", with no fear of ``wasting one's vote". As in SCPV, the votes are counted and the party with the most votes wins, but in AV, the results are a much better measure of the ``true support" of a party, and thus offers a more meaningful proportion for use in a PR system. But for a two-word change on the ballot (``or more"), AV is *operationally identical* to plurality. AVs trivial technical change wipes away the distorted, undemocratic deficiencies of SCPV, while keeping all its technically simple infrastructure to which B.C. voters are well accustomed.

Compared to the plurality voting system, the trivial technical change of Approval Voting, coupled with its profound democratic improvement, makes AV the obvious ``plug-in" replacement for plurality voting in every conceivable voting system. AV's non-distorted party support measure makes this particularly true for PR systems. As well, Approval Voting would also make a substantial improvement on its own for the present voting system should the Assembly not come to a consensus on the various PR systems available.

# **1.** Why Single Choice Plurality Voting must never be used, even in Mixed-PR systems

This submission argues that if the Citizen's Assembly recommends some time of proportional representation (PR) system for B.C., it *must not employ the plurality voting system* to determine a party's support fraction, but instead use the lesser-known but vastly superior ``Approval Voting" (AV) system. It will be shown that AV is a trivial extension, and operationally identical, to single-choice plurality voting (SCPV), while being profoundly more democratic and offering a much more meaningful measure of a party's true support. AV will be shown to be an obvious ``plug-in" replacement for SCPV voting that renders the latter obsolete, under any circumstances, especially in PR systems.

SCPV voting has several well-known deficiencies which make it a terrible choice in elections with more than two candidates. *e.g.* In elections with three candidates, a candidate can be despised by 66% of the population, yet win the election with 34% of the vote, if the other two candidates, who may have similar views to each other, split the vote 33% each. Far from being a theoretical curiosity, ``vote splitting" happens none too infrequently and the public is well aware of it. This leads them to strategize in a few ways : by choosing the ``lesser of two evils", even though their true preference is a third party candidate who, through advance polling, they decide cannot win the plurality election ; or similarly by ``burying" where they vote for one party to prevent another from winning, again though their true preference is a third party. Facing these distasteful strategies, many do not bother to vote at all, or complain about the fear of ``wasting one's vote". SCPV almost inevitably leads to polarized two-party dominated elections (``Duverger's Law" Ref.[Duverger 1963]), where smaller parties and their political ideas are suppressed. Moreover, due to the distortions caused by strategic voting, the fraction of a

party's ``popular vote" is not a true measure of their ``popular support", making SCPV a poor choice to determine ``proportion" in a PR system. All the above make SCPV a grossly undemocratic voting system.

The results of the recent federal election illustrate the main point. It was often discussed that the Green party ``would have" received a few seats in Parliament based on their "popular vote" in the SCPV election. But clearly many people did not cast their lone ballot for the Greens even if they truly supported their cause because advanced polling gave them no chance of winning. These people chose the ``lesser-of-two-evils" strategy. Obviously the *true* level of support for their policies was considerably higher than the few % of the SCPV vote they received. Similarly, many voters heeded the pleas of Liberal leader Paul Martin and voted Liberal in an attempt to prevent the Conservative candidate from winning, even though these voters were NDP supporters. This ``burying" strategy distorted the true level of support for the NDP as measured by the SCPV results. Even with the badly distorted SCPV measure of ``popular support", the Greens and NDP would have received more seats, but they would have had more still if a meaningful measure of support for these party's policies was used. Any meaningful PR system must employ a meaningful measure of the electorate's true level of support for a party. SCPV is utterly incapable of providing that measure. *With much better alternatives* available, SCPV should not be used in any electoral scheme.

### **2.** Approval Voting

The only desirable feature of SCPV is that it is technically easy to implement and to decide a winner<sup>2.1</sup>: each voter marks one candidate on a ballot, and whoever gets the most votes, wins. However, there is another voting method which is operationally equivalent to SCPV, uses almost precisely the same ballots, decides the winner in precisely the same way, but is *profoundly* more democratic than SCPV. It is called Approval Voting.

Approval voting (AV) is a voting system where the electorate can vote for, or approve of, *as many candidates as they wish* on a ballot (see Ref. [Bram 1993]). The election winner is the candidate with the most votes. Philosophically, it is based on the self-evident notion that if a voter would approve of more than one candidate to be his/her representative, why shouldn't he/she be allowed to vote for all of them ? Restricting the voters choice to a single vote is arbitrary and counter to the fact that voters often support, or at least approve of, more than one candidate.

Operationally, AV is the most trivial extension to SCPV voting: the *only thing that must be changed* are the words ``vote for one" to ``vote for one *or more*" on the ballot. That's it. After the ballots are marked with one or more selections, the election proceeds *precisely* the same as for SCPV, a process which the Canadian electorate is well accustomed to: the ballots are counted, scrutinized, and the candidate with the most votes wins.

# 2.1 Benefits of Approval Voting

Despite the trivial change to the well worn SCPV procedure, AV *wipes out* most if not all of SCPV's deficiencies and provides for *profoundly* more fair and democratic elections by giving a much more meaningful measure of the level of a party's support. Some of AVs benefits are listed here<sup>2.2</sup>:

- 1. *It eliminates ``wasted votes''*: A voter can select a single favourite, more than one favourite, or if their preferred candidate is not likely to win (known from media polling), he/she can still vote for their preferred candidate plus another more viable candidate that they approve of. There is no more need to worry about wasting one's vote (something that plagues *e.g.* Ralph Nader supporters in the U.S. Presidential elections).
- 2. *It eliminates ``vote splitting''*: Under AV, the candidate with the largest *overall* support wins. *e.g.* in a three-way election with two similar candidates with 33% support each and one despised by 66% of the electorate, one of the two similar candidates will likely win since voters will likely vote for one or both of them, and not the despised candidate. So the candidate approved of by the majority will win, as it should be.
- 3. *It discourages negative campaigning and encourages centrist candidates:* In the absence of vote splitting, it is no longer a good strategy to cater to a small minority of voters and campaign negatively in the hopes that the opposition vote will split. Candidates must now appeal to the majority of the voters as a second (or third, or ...) acceptable candidate, in addition to being a single preferred candidate. This encourages moderate candidates that can appeal broadly to the electorates political spectrum.
- 4. *It will increase voter turnout:* Without the fear of wasting one's vote, or the despair of not being able to decide on a single candidate, more voters will be more likely to cast a ballot.
- 5. *It will give smaller parties (and independents) their proper due:* Supporters of smaller parties (or independents) no longer need fret about voting for their preferred candidates, since they can now vote for them and another candidate they approve of who is more likely to win. The election returns will be a truer reflection of their support and the acceptability of their candidate(s).
- 6. *It provides a better measure of a party's true level of support:* As mentioned in point 5), AV provides a more meaningful measure of party's popular support (or approval) than SCPV. This makes AV particularly suited to PR or mixed-PR schemes when technical simplicity is desired.

# **2.2 Approval Voting versus ranked-ballot schemes**

Of course, AV is not the only voting system other than SCPV. The ``Single Transferable Vote" (STV) has received considerable attention. It is a ``ranked ballot" method where voters may select more than one candidate, but rank them in order of preference. There are other ranked-ballot methods e.g. the Borda Count, or Condorcet Voting. However, unlike SCPV, and AV, these methods of choosing a winner are not straightforward, and present a considerable operational change from current electoral practise. Ranked ballots do offer, however, a ``finer-grained" measure of the true popular support of a party via the ranking scheme. This submission makes no comment on the relative merits of the ranked-ballot schemes. Its purpose is simply to argue that if the technical simplicity of SCPV is desired, then AV is the obvious ``plug-in" replacement for SCPV should not be employed under any electoral circumstance.

# **3. Concluding Remarks**

It has been argued that Approval Voting *should* be utilized in every case where singlechoice plurality voting is being considered. It is identically easy to implement and therefore as accustomed to all Canadian voters, while being profoundly more equitable and democratic and providing a much better measure of a party's true level of support. Thus, AV should be used in rather than SCPV to determine a party's ``support proportion" in any PR scheme.

It should be noted that *AV offers a significant improvement on its own* (*i.e.* not in a PR scheme) over the present SCPV system. If the Citizen's Assembly finds it difficult to arrive at consensus on a PR scheme (pure, mixed, with/without ranked ballots), then they are urged to consider AV as an effective ``fall back" option that is sure to be palatable to the electorate. Yet again, under no circumstances should SCPV be allowed to remain.

Though Approval Voting is a relatively recent concept, its use has spread to a number of high-profile organizations world-wide (see Ref.[Bram 1993]), the highest profile being the United Nations, where it is used to elect the Secretary General. If AV is good enough to elect the Secretary General of the U.N., it ought to be good enough to elect MLAs.

For more information on Approval Voting, please refer to Ref.[AV References]

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### Footnotes

... winner  $\frac{2.1}{2}$ 

The fall 2000 US Presidential election notwithstanding ;-) ... here  $\frac{2.2}{2}$ 

The following are summarized from Ref. [Bram 1993].

Marcello M. Pavan 2004-08-11