Why voting sucks, and how to fix it: The BC-STV Referendum

An Undistinguished Lecture

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Outline

- Is there a perfect voting system?
- Different voting systems used around the world
  - First Past the Post - our current system
  - List-Proportional and Mixed Member Proportional
  - Single Transferable Vote

The perfect voting system

Arrow's Theorem (1951, Nobel Prize 1972)

Given the following reasonable criteria

- **Non-dictatorship** - duh
- **Universality** - all outcomes are possible
- **Independence of Irrelevant Alternatives** - removing losers doesn't matter
- **Monotonicity** - switching to vote for someone can't hurt them
- **Non-imposition** - all ordering of candidates are possible

there is no voting system that can satisfy all of these simultaneously.

voting is going to suck, no matter what you do

More Useful Criteria

Proportionality - percentage of votes a party gets should be similar to their percentage of seats in legislature

Party Control - political parties shouldn't have too much power to limit choices, they should respond to the vote rather than shaping it

Simplicity - voting process should be simple

Strategic Voting - voters should have no incentive vote dishonestly in order to avoid a negative outcomes. When votes for losing candidates are discarded this incentive is very strong.

Electoral Systems

Plurality (First Past the Post - FPTP)

- single member ridings. In each riding the candidate with the most votes wins, majority not required
- remaining losing votes discarded

Problems

- see map
- Wasted votes - 50-60% of votes are regularly discarded without contributing to the makeup of parliament since
- encourages strategic voting to avoid wasting your vote
- tends towards two party rule

Conclusion

- totally sucks

Electoral Systems

List Proportional (many variations eg. D'Hondt)

- vote for party or candidates, all votes go towards party proportion in legislature
- lists can be open or closed, many ridings or one national riding (eg. Israel)

Mixed Member Proportional (MMP)

- one local candidate election + List-PR using party lists based on total vote proportions
- tried to pass this in Ontario a few years ago, failed

Problems

- entrenches party power

Conclusion

- only moderately sucks

Electoral Systems

Proportional Single Transferable Vote (BC-STV)

- Rank all candidates from any party, single vote is applied in order of preferences, divided if candidate gets more votes than needed

- tried in referendum in BC few years ago, failed to meet 60% support required, only got 58%.
- currently used in Ireland and Malta for national elections Tasmania general elections and Australian Senate
- was decided upon for BC by an assembly of randomly selected voters (2 from every riding in BC) after a year of study and debate.

How BC-STV works

Ridings under the new system will be merged versions of current ridings with multiple members elected per riding.

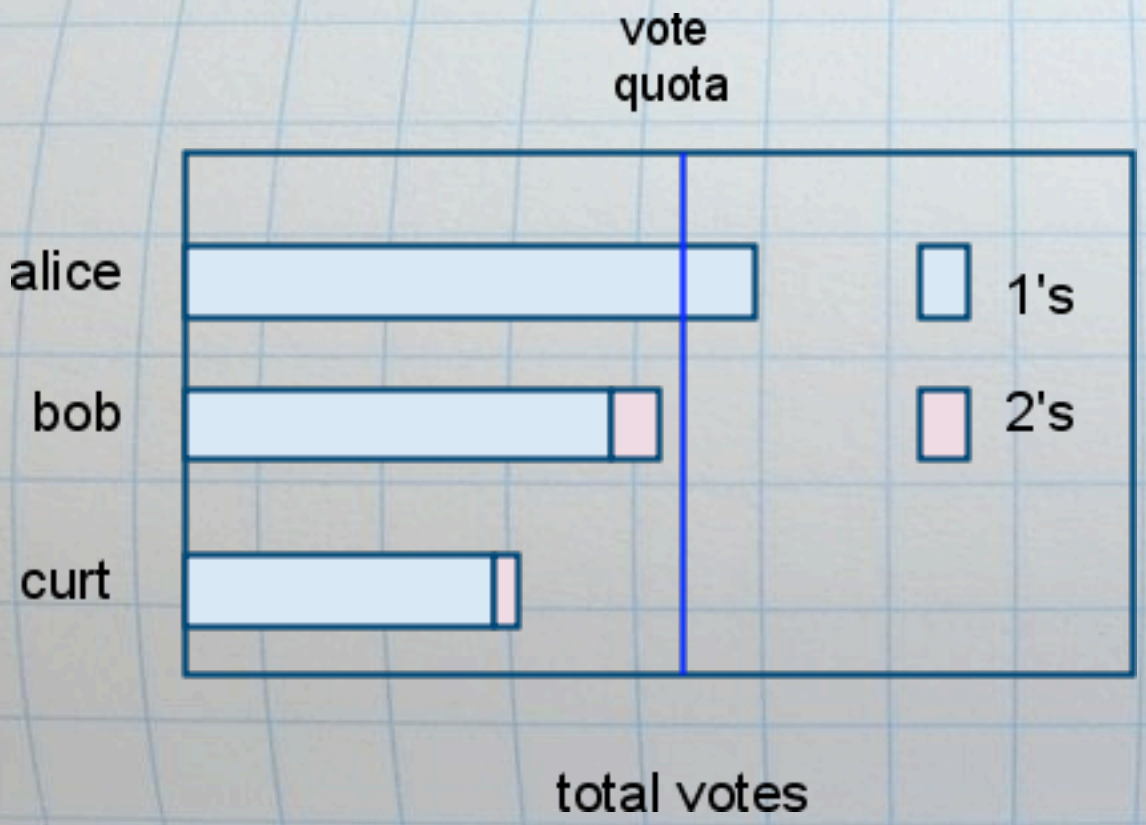
1. Every voter ranks candidates in order of preference. They can rank as many or few as they like.
2. All first choices are counted and anyone with *enough votes* is elected:

$$\left[\frac{\text{Total \# of ballots}}{\text{\# of Members + 1}}\right] + 1$$

So if your riding has 4 members and 100,000 votes were cast you need 20,001 votes to be elected

How BC-STV Works

3. If a candidate have more votes than needed, the remainder are weighted and transferred to their next choice.



$$weight = \frac{\text{Extra votes}}{\text{Total votes for candidate}}$$

How BC-STV Works

4. Transfer weights are multiplied together after each time a ballot is transferred.
5. If there aren't enough votes at any point to elect a candidate, the least popular candidate is dropped and the next votes are transferred with no additional weighting.

Plus a bunch of special cases.... but that's it really.

Electoral Systems

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Problems

- problems? what problems?
- some people think its complicated
- doesn't lead to disproportionately strong majorities like FPTP. ie. "Strong Government"
- more likely to lead to coalitions, just like List systems, some people don't want many points of view represented in parliament

Conclusion

- hardly sucks at all

Questions?

Election is **May 12**
Find out more at stv.ca
Read my blog fairvoteubc.wordpress.com

Free t-shirt for the best questions!

examples questions:

- *How do I help promote this amazing idea?*
- *How could anyone be against this?*