Weighted Parliamentary Voting:

A new (and very simple) form of proportional representation

Brief presented to the Special Committee on Electoral Reform

By Bertrand Lemire, citizen

2016-10-04

SUMMARY

This brief presents a new form of proportional representation. Simulations of eleven elections (federal and provincial) reveal the effects it could have had.

This system does not change the voting system as such, but rather how Parliament works. The number of MPs/MNAs and ridings remain the same. As such, it would become part of the tradition of electoral mechanics and would not be a revolution, but rather an adjustment to the current system, while introducing strict proportionality. This proportionality would manifest in the weight that elected MPs or MNAs would have in parliamentary votes to reflect the votes cast in the election. The principle of "one voter, one vote" remains and is even enhanced in order to give weight to "losing votes". However, the principle of "one MP/MNA, one vote" would no longer be fully the case; the weighting given to MPs/MNAs would be modulated and sometimes non-elected candidates would come into play to give a voice to non-represented parties.

This system also has the benefit of fully respecting the five main steering principles that electoral reform must satisfy.

The brief therefore contains:

- A summary presentation of the system (page 3)
- A summary of the simulations, in numbers and charts (page 4)
- A chart-based comparative presentation of the last five federal elections (page 6)
- A discussion on the response that this system provides for each of the five steering principles (page 10)
- An appendix containing the nine basic rules of the proposed system (page 13).

PRESENTATION OF THE WEIGHTED PARLIAMENTARY VOTING SYSTEM

The main idea is to weight the <u>importance</u> of an MP when he/she votes in the House of Commons: 1) based on the votes received in his/her riding; and 2) based on the votes that his/her party received overall across the country. Unlike other proportional systems, this system does not aim to change the number of elected MPs per party, but rather the influence that these parties can have overall in parliamentary votes. Generally speaking, MPs from an over-represented party will have their weight lessened somewhat, whereas elected MPs from underrepresented parties will have an increased weight, in relation to the "one MP, one vote" system.

Parties <u>without an elected MP</u> and who have received votes beyond a certain threshold will be allocated a (non-elected) "representative" in the House of Commons, with nearly all the attributes of an elected MP. This representative is appointed based on mathematical criteria from the party's list of candidates who ran in the election and positioned themselves well.

The threshold for obtaining a representative for a party is 1/338th of the overall valid votes at the national level in the general election (due to the fact there are 338 ridings). Under this threshold of 1/338th of the votes (=0.3% approximately), a party cannot be deemed to merit representation in Parliament.

An array of nine rules provides a thorough framework for allocating the weighting of each elected MP or representative, called gross "weighted parliamentary votes" (WPV). Certain rules establish value standards, e.g. a bottom limit for WPV to avoid a riding having too little influence, or the implementation of multiples of quarters (e.g. 0.75 or 1.25) as possible WPV values. The nine rules are detailed in **Appendix A**.

The gross WPV <u>per party</u> are equal, <u>as a percentage</u>, to the votes received per party, making it a proportional representation system.

However, the system also includes an additional element for the WPV: increased weighting, equal weighting, in order to promote system stability, constituting a form of "winner's bonus" (which remains the party having received the most votes). There is therefore an "increased WPV", as opposed to a "gross WPV".

The system is described in greater detail at the address below:

https://svpmerci.wordpress.com/2016/09/04/vote-parlementaire-pondere-une-forme-inedite-de-proportionnelle/ (French only)

The increased WPV is different from a pure proportional representation system based on the parameter that the Special Committee on Electoral Reform (hereafter referred to as the "Committee") will need to establish in its recommendations.

Weighted Parliamentary Voting
By: Bertrand Lemire

SIMULATIONS - SUMMARIES

We completed simulations of each of the last eleven elections in Quebec, six at the provincial level (1998 to present) and five at the federal level (2004 to present), to see concretely, riding by riding, what the WPV would produce.

These eleven simulations show that:

- The number of **representatives** varies <u>between zero and two</u> per election, for a total of 9 representatives in 11 elections:
 - o 4 elections without a representative
 - o 5 elections with only one representative each
 - o 2 elections with 2 representatives each
- The parties that would have benefitted from representatives:
 - o Federally: GPC (3)
 - o In Quebec: UFP (1), QS (1), PVQ (3), ON (1).
- Gross WPV ranging from [1-¼] to [1+¼] (or 0.75 to 1.25) represent a large majority of the representatives:
 - o 78% in Quebec
 - o 70% federally
- Weightings equal to or higher than 3 represent a very small minority:
 - o 2% in Quebec
 - o 1% federally
- At the federal level, the maximum gross WPV for a representative would have been 21 (for a Green Party **representative** in 2008, the party having received 7% of the vote).
- In Quebec, the maximum gross WPV for a representative would have been 15 (for a single elected representative from the ADQ in 1998, the party having received 12% of the votes).

To summarize, the weightings are not generally very far from the average (average=1), but in the rare case of non-elected representatives or elected MPs/MNAs from underrepresented parties, the weightings take on a significant value. Graphically, the distribution is as follows:

Figure 1

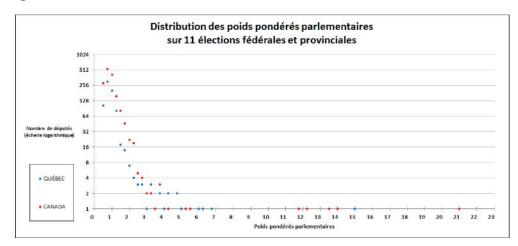


Figure 2

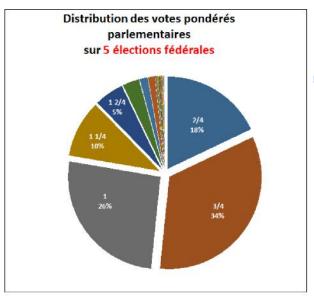
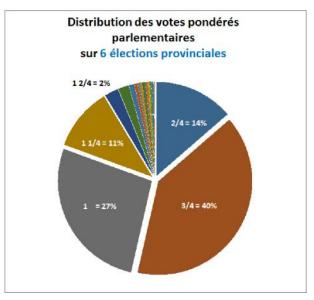


Figure 3



An example to clarify: Of the eleven elections, 10% of all federal MPs and all provincial MNAs would have had a gross WPV of $1.25 (1\frac{1}{4})$.

SIMULATIONS OF THE LAST FIVE FEDERAL ELECTIONS

For each of the last five federal elections, we have chart-based comparisons of the following elements:

- Seats obtained;
- Votes received:
- Simulation of gross WPV;
- Simulation of WPV increased by ½ per MP;
- Simulation of WPV increased to 1 per MP.

For comparison purposes, the histograms are all proportions (in %) of the total per party in relation to the total for all parties combined.

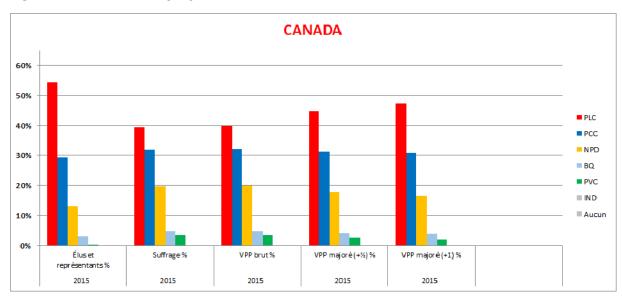


Figure 4 - 2015 Election - Majority

The differences between the first data cluster ("Elected MPs and representatives") and the second data cluster ("Vote %") reveal the distortions created by the current system. The following data clusters are simulations that can be compared to the first two data clusters.

It can be clearly seen that the gross WPV nearly eliminates all of the distortion and that the increased weighting makes it possible to stay away from pure proportionality, it being represented in the second data cluster ("Vote %").

It should be remembered that in all cases, the 50% bar is the line between a majority and a minority.

Figure 5 - 2011 Election - Majority

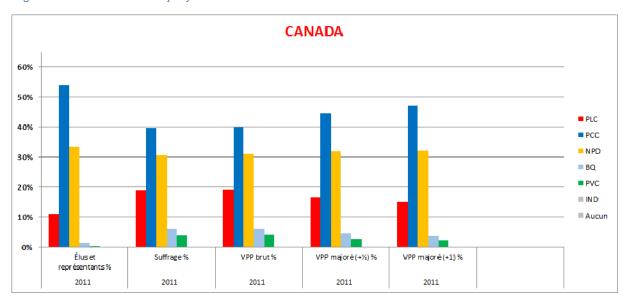


Figure 6 – 2008 Election – Minority

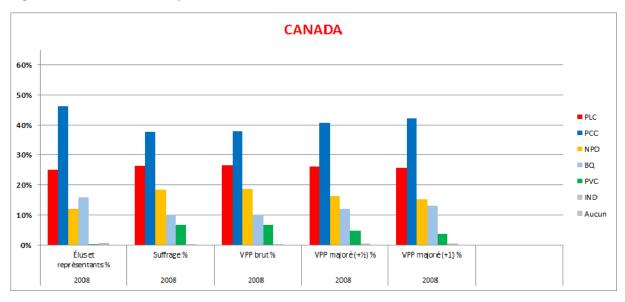


Figure 7 – 2006 Election – Minority

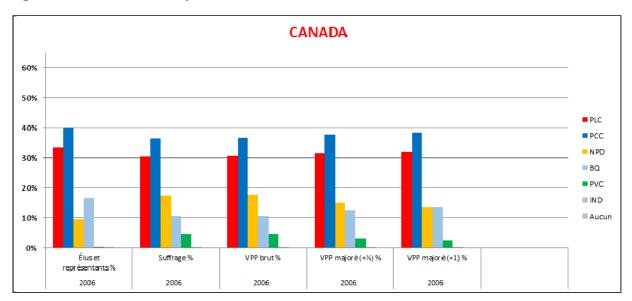
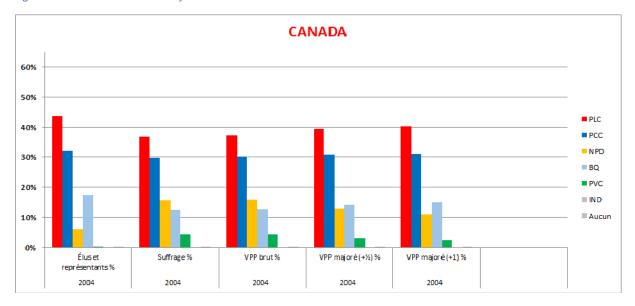


Figure 8 – 2004 Election – Minority



A few additional remarks accompanying these charts

The choice of increase is a decision that must be made as a society. It is a parameter that enables the Special Committee on Electoral Reform to ponder the appropriate level: the greater the increase, the more we get away from pure proportional representation and the easier it is to ensure stability. More precisely, we should say that the greater the increase, the easier it is to achieve a majority alliance in the House.

The 2011 and 2015 elections resulted in majority governments whereas the elections of 2004, 2006 and 2008 resulted in minority governments in the first past the post system. However, even with the WPV increased to 1 per MP, the winning parties would not achieve the 50% bar and would therefore be minority governments in every case.

The aim of a proportional representation system would be to correct the distortion between the votes and the seats obtained. As a general rule:

- There are fewer distortions to be corrected in minority-government situations.
- The major national parties that finish first and to a lesser extent in second benefit from the distortion whereas the others are at a disadvantage.
- A party that is strong locally (in a region) can also benefit. This was the case with the BQ before 2011.

Weighted Parliamentary Voting
By: Bertrand Lemire

RESPONSES TO THE FIVE STEERING PRINCIPLES OF ELECTORAL REFORM

The reform must comply with the five steering principles. We will examine each one of them, comparing them with the increased WPV system. We are referring to the original (and detailed) wording of these principles as presented in the mandate given to the Committee and not the summaries or abridged versions of the said original wording.

1) Effectiveness and legitimacy:

"That the proposed measure would increase public confidence among Canadians that their democratic will, as expressed by their votes, will be fairly translated and that the proposed measure reduces distortion and strengthens the link between voter intention and the election of representatives;"

First of all, the gross WPV makes sure that <u>each vote counts in calculating the overall weighting</u> that each party receives, regardless of whether a vote is cast for the elected candidate or the defeated candidate. It is a direct translation of the vote in the voting results.

Secondly, the gross WPV not only reduces distortion, it eliminates it. The gross WPV is then used as a basis to calculate the increased WPV, which reintroduces a certain amount of distortion in order to take other criteria into account. And as mentioned, the Committee can recommend the increase level that it deems appropriate in terms of balancing the various criteria.

2) Engagement:

"That the proposed measure would encourage voting and participation in the democratic process, foster greater civility and collaboration in politics, enhance social cohesion and offer opportunities for inclusion of underrepresented groups in the political process;"

To encourage voting, we first need to understand what discourages it. One of the factors is certainly the impression of a "wasted vote" when the candidate or party of one's choice has no chance of ending up first. However, as previously stated, the gross WPV grants an equal effect to each vote, whether the candidate is elected or not. There is therefore no argument for abstention at that point. The voter's preferred candidate may not win, but by voting for this candidate, it mathematically translates into influence for that party in Parliament.

Weighted Parliamentary Voting

By: Bertrand Lemire

Moreover, the threshold for a group to be represented in Parliament is established regardless of whether or not this group manages to elect a candidate or not, thanks to the appointment of representatives. This threshold is based on an implacable and democratic logic: one 338th of the valid votes (approximately 0.3%) at the national level. It is a threshold that is very low and finding its mathematical justification in the number of ridings, but which does not seem to be a burden in the eleven simulations, particularly at the federal level (only three representatives in five elections).

Lastly, it should be mentioned that the WPV corrects the <u>effective</u> weighting of the underrepresented groups, which incentivises the party in power to take them into account, all the more so since there will likely no longer be a government with a majority weighting, as can be seen in the simulations. Alliances will be practically unavoidable and therefore there will be increased collaboration.

3) Accessibility and inclusiveness:

"That the proposed measure would avoid undue complexity in the voting process, while respecting the other principles, and that it would support access by all eligible voters regardless of physical or social condition:"

The WPV in no way changes the current voting system. There are therefore no complications added to the voting process.

The only complication that may occur is limited to the way in which Parliament operates and is therefore not covered by this criterion. I would however invite the reader to consult the Internet site mentioned previously (page 3) for some thoughts on this subject. It discusses the electronic voting of MPs or MNAs, resignations and defections.

4) Integrity:

"That the proposed measure can be implemented while safeguarding public trust in the election process, by ensuring reliable and verifiable results obtained through an effective and objective process that is secure and preserves vote secrecy for individual Canadians;"

Weighted Parliamentary Voting

By: Bertrand Lemire

Here again the electoral process is not changed, confidence and confidentiality will remain unaffected.

The only difficulty we foresee is an educational one in order to explain the dropping of the "one MP, one vote" principle and the adoption of the nine basic rules (Appendix A). In my view, this should not be a major challenge with citizens. Among the MPs, there will likely be some resistance, which would be faced by any reform regardless.

5) Local representation:

"That the proposed measure would ensure accountability and recognize the value that Canadians attach to community, to Members of Parliament understanding local conditions and advancing local needs at the national level, and to having access to Members of Parliament to facilitate resolution of their concerns and participation in the democratic process;"

At the risk of repeating myself, the ridings will not be affected and therefore access to MPs and local issues will not be negatively impacted by the WPV, with one slight nuance possible: elected MPs from less-populated ridings could see their individual weighting lowered.

However, the gross WPV limits this decrease by ensuring a bottom weighting (established at $^{1}/_{2}$ in the simulations) and the increased WPV softens these differences through egalitarianism in the increases.

As mentioned, the Committee will be responsible for proposing the increase level it deems appropriate to ensure the balance between the various criteria sought, including local representation.

Moreover, the system proposed here has a certain benefit. Inequality, in terms of the number of voters, between ridings, no longer presents a problem with WPV since the weighting of the elected MP is proportional to the number of votes received. Over time, as revisions are made to the electoral map, the ridings could be made to further correspond with geographic boundaries, communities or demographic or social specificities. Within this perspective, there would be no perceived injustice in reducing the number of urban ridings and increasing the number of regional ridings, as long as the WPV increase remains at an acceptable level in this regard.

OPTIONS

The system that we are proposing offers a few parameters that can be set. Here is a list:

- The bottom weighting for an individual gross WPV ($\frac{1}{2}$ used in the simulations);
- The ceiling weighting for an individual gross WPV (no ceiling values were used in the simulations);
- The maximum number of representatives per party (1 used in the simulations);

Weighted Parliamentary Voting
By: Bertrand Lemire

- Egalitarian increase (simulations conducted with $^1\!/_2$ and 1);
- The electoral map (no changes to the current map);
- The areas in which Parliament could use an egalitarian vote rather than the WPV (e.g. for decisions regarding the internal operations of Parliament, selecting the Speaker, etc.).

APPENDIX A - WPV BASIC RULES

- 1. An elected MP (the one receiving the most votes in the election, as is currently the case) is given a weighted vote in Parliament based on his votes (number of votes received in relation to the total valid votes across the territory).
- 2. An additional weighting is added representing the "lost votes" of his/her own party in other ridings won by opposing parties. This additional weighting is allocated on a pro rata basis of the weighting established by principle no. 1. An independent elected MP does not benefit from this additional weighting since he/she is not attached to a party.
- 3. A party that has no elected MPs but which received votes above a certain threshold is allocated a "representative" in Parliament, a representative who receives the total weighting of his/her party (still based on the votes).
- 4. A bottom weighting is established at 0.5. No MP can be allocated less than this value (the idea here is that an elected MP must have a minimum amount of recognition otherwise he/she might be simply ignored or become disinterested in Parliamentary votes).
- 5. The weightings are rounded off the nearest guarter (0.50 0.75 1.00 1.25 etc.)
- 6. The total weighting of the elected MPs and representative must equal the total number of seats.
- 7. The total weighting per party must be equal, to the nearest quarter, to its weighting before principle no. 4. (This will require adding or subtracting quarters from the most advantaged or least advantaged elected MPs based on principle no. 5. It is a form of weighting transfer between elected MPs of the same party to ensure the bottom weightings and the rounding off to the nearest quarter.)
- 8. To be allocated a representative in Parliament, a party <u>without elected MPs</u> must have received a total number of votes, in relation to the overall total for the country that is at least equal to the fraction representing the valid votes divided by the number of ridings. (Anything under this threshold, the party does not have sufficient support to justify a single seat). For example, in Quebec, a party would have to receive 1/125th of the valid votes to earn a representative.
- 9. The representative, when principle no. 8 permits it, is the one among the party's candidates in the election who ranked the highest, and in the event of a tie among several candidates, the one who received the most votes (this is an objective way of appointing the representatives).

Weighted Parliamentary Voting

Page 13