



# MAKE EVERY VOTE COUNT—ALWAYS!

"**PPR123+**" = Perfect Proportional Representation + Democratic Legitimacy + Demographic Balance + Voter Equality = True Democracy!

## "**PPR123+**" = PERFECT PROPORTIONAL REPRESENTATION + BALANCED REPRESENTATION!

**PPR123+** is a major extension of the basic principles of **PPR123**, enhanced by much greater use of its flexible capacity to create '*At-Large*' / *Regional* (i.e. 'top-up') seats, to provide more **Balanced Representation**: by party, by province/region, by gender and demographic diversity.

From the original conception of **PPR123**, and as stated in its presentation to the ERRE Committee, it was noted that:

- "Some accommodation(s) should be provided to avoid wasting votes for small parties and independent candidates."
- "Some accommodation should be provided to ensure that the Government has representation from all provinces and/or regions. "Similar accommodations should probably be considered for the Official Opposition."
- "Clear guidelines or formulae should be established for each party to follow in their reassignment of all votes for their defeated candidates to their elected candidates. This should address the possibility of more balanced demographic distribution of parliamentary voting power."

From a broader perspective gained through other testimonies to the ERRE Committee and further reflection on concerns regarding representation as expressed by ERRE members (Ms May and Mr Cullen in particular—see excerpts from the transcript of my testimony (Sept.28) at the end of this document), it became clear that the ideal voting system should provide more than simply *Perfect Proportional Representation*, as **PPR123** alone could achieve. **PPR123+** was needed—to more effectively and directly address the need for more **Balanced Representation** of all kinds.

**PPR123+** was outlined in the document "Announcing '**PPR123+**' ... Perfect Proportional Representation—plus!" Briefly, through its commitment to truly '*Make Every Vote Count*', all votes for losing candidates (51.7% or more than 9 million in Canada's 2015 election) are retained by each party and reassigned amongst their MPs. This enormous reservoir of votes—rather than simply being wasted (as under other voting systems)—provides **PPR123+** with unparalleled flexibility that can be quite effectively (*and entirely democratically*) used to provide the Parliamentary voting power for the creation of as many 'At-large' / Regional 'top-up' seats as deemed appropriate. **PPR123+** thereby fulfills the two essential characteristics of an ideal electoral system—**Perfect Proportional Representation** + demographically **Balanced Representation!**

This is *not* to suggest excessive use of this flexible capacity. The table on the following page illustrates the impact from the creation of between **3 'At-large' / Regional representatives** (i.e. the minimum number, to provide representation for the votes for Independent candidates and small parties without elected representation), up to **129 'top-up' representatives** [note that the latter would be about 20% less than the number needed under MMP; also, for both voting systems, the appropriate additional number of members could be lessened by reducing the number of ridings].

As previously explained for **PPR123** (also applicable to **PPR123+**), the Parliamentary voting power of each party is directly derived from and exactly equal to their total of all 1<sup>st</sup>-choice votes (i.e. for their elected *and* defeated candidates)—which is equitably allocated amongst all of their MPs (i.e. both those elected *and* any 'top-up' or 'At-Large' / Regional MPs). [In the following table, these are expressed as the "Avg. (Citizens') Votes per Seat", or converted into the " '**Equivalent Seats** ' per MP's vote ".]

The table on the following page shows how **MP voting power can be equalized** by the equitable addition of 'top-up' seats **under PPR123+**:

- S1: the results under FPTP, show that the winning Liberals needed far fewer votes per MP than any other party.
- S2: **PPR123** with the addition of **3** 'top-up' seats—for the *unrepresented* parties and independent candidates.
- S3: **PPR123+** with **25** 'top-up' seats, provides *rebalanced* regional representation for all parties.
- S4: **PPR123+** with **40** 'top-up' seats, provides *more balanced* representation for all parties.
- S5: **PPR123+** with **52** 'top-up' seats, provides '*highly*' *balanced* representation, with **vote equality for MPs of all Opposition parties.**
- S6: **PPR123+** with **129** 'top-up' seats, provides '*fully*' *balanced* representation, with **vote equality for all MPs of all parties.**

**NB:**

1. With **PPR123+**, the addition of 'top-up' seats **would NOT change the total voting power of any Party in Parliament !!!**
2. Each party would allocate its 'top-up' seats so as to achieve the most demographically **balanced** and **inclusive** representation, by awarding them to the most fitting **defeated candidates** as per pre-defined prioritized and objective **criteria**, e.g.: (1) by province/region; (2) by gender; (3) by demographic diversity.
3. Official Parliamentary voting records would likely remain expressed as numbers of MP seats—hence the total Citizens' votes entrusted in each MP would be converted into the corresponding fractional number of '**Equivalent Seats** ' per MP's vote"—for equitability with any province that is constitutionally guaranteed a specified number of seats.

While it would be for Parliament to decide on the appropriate level of 'top-up' to achieve the desired forms and degrees of demographically balanced representation (based on **gender parity** and **diversity** objectives), the mid-range alternatives [see table on following page] appear to achieve excellent levels of MP-vote proportionality (noting again that **PPR123** always ensures *perfect* Party-vote proportionality), along with substantially enhanced **representational balance**, with a much smaller number of additional MPs than required under MMP.

## Election Analysis under PPR123+ with different levels of 'top-up' for more Balanced Representation

<b>2015 Election Results by Party</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
T total Votes	818,652	5,600,496	605,864	6,930,136	3,461,262	142,943	17,559,353
Votes for Elected representatives	190,764	2,748,271	37,070	4,616,449	891,978		8,484,532
Votes for Defeated candidates	627,888	2,852,225	568,794	2,313,687	2,569,284	142,943	9,074,821
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>		<b>338</b>
Proportional seats (i.e. under PR)	15.8	107.8	11.7	133.4	66.6	2.8	338
<b>Over (Under) representation</b>	<b>(5.8)</b>	<b>(8.8)</b>	<b>(10.7)</b>	<b>50.6</b>	<b>(22.6)</b>	<b>(2.8)</b>	<b>0.0</b>

<b>S1: results under FPTP</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
Top-up seats (none)							
<b>Total seats</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>		<b>338</b>
Avg. Citizens' Votes per Seat	81,865	56,571	605,864	37,664	78,665		51,951

<b>S2: PPR123 plus 3 top-up seats</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
Independent representation top-up						<b>3</b>	
<b>Total seats</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>3</b>	<b>341</b>
Avg. Citizens' Votes per Seat	81,865	56,571	605,864	37,664	78,665	47,648	51,494
'Equivalent Seats' per MP's vote	<b>1.59</b>	<b>1.10</b>	<b>11.77</b>	<b>0.73</b>	<b>1.53</b>	<b>0.93</b>	<b>1.00</b>

<b>S3: PPR123+ plus 25 top-up seats</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
Rebalanced regional top-up by Party	<b>1</b>	<b>7</b>	<b>6</b>		<b>8</b>	<b>3</b>	<b>25</b>
<b>Total seats</b>	<b>11</b>	<b>106</b>	<b>7</b>	<b>184</b>	<b>52</b>	<b>3</b>	<b>363</b>
Avg. Citizens' Votes per Seat	74,423	52,835	86,552	37,664	66,563	47,648	48,373
'Equivalent Seats' per MP's vote	<b>1.54</b>	<b>1.09</b>	<b>1.79</b>	<b>0.78</b>	<b>1.38</b>	<b>0.99</b>	<b>1.00</b>

<b>S4: PPR123+ plus 40 top-up seats</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
More balanced representation top-up	<b>4</b>	<b>8</b>	<b>9</b>		<b>16</b>	<b>3</b>	<b>40</b>
<b>Total seats</b>	<b>14</b>	<b>107</b>	<b>10</b>	<b>184</b>	<b>60</b>	<b>3</b>	<b>378</b>
Avg. Citizens' Votes per Seat	58,475	52,341	60,586	37,664	57,688	47,648	46,453
'Equivalent Seats' per MP's vote	<b>1.26</b>	<b>1.13</b>	<b>1.30</b>	<b>0.81</b>	<b>1.24</b>	<b>1.03</b>	<b>1.00</b>

<b>S5: PPR123+ plus 52 top-up seats</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
'Highly' balanced representation top-up	<b>6</b>	<b>9</b>	<b>11</b>		<b>23</b>	<b>3</b>	<b>52</b>
<b>Total seats</b>	<b>16</b>	<b>108</b>	<b>12</b>	<b>184</b>	<b>67</b>	<b>3</b>	<b>390</b>
Avg. Citizens' Votes per Seat	51,166	51,856	50,489	37,664	51,661	47,648	45,024
'Equivalent Seats' per MP's vote	<b>1.14</b>	<b>1.15</b>	<b>1.12</b>	<b>0.84</b>	<b>1.15</b>	<b>1.06</b>	<b>1.00</b>

<b>S6: PPR123+ plus 129 top-up seats</b>	<b>BQ</b>	<b>Cons.</b>	<b>Green</b>	<b>Liberal</b>	<b>NDP</b>	<b>Indep.</b>	<b>Total</b>
<b>Seats won</b>	<b>10</b>	<b>99</b>	<b>1</b>	<b>184</b>	<b>44</b>	<b>0</b>	<b>338</b>
'Fully' balanced representation top-up	<b>12</b>	<b>50</b>	<b>15</b>		<b>48</b>	<b>4</b>	<b>129</b>
<b>Total seats</b>	<b>22</b>	<b>149</b>	<b>16</b>	<b>184</b>	<b>92</b>	<b>4</b>	<b>467</b>
Avg. Citizens' Votes per Seat	37,211	37,587	37,867	37,664	37,622	35,736	37,600
'Equivalent Seats' per MP's vote	<b>0.99</b>	<b>0.99</b>	<b>1.01</b>	<b>1.00</b>	<b>1.00</b>	<b>0.95</b>	<b>1.00</b>

**Excerpts from the audio record of the presentation by PJ Jewell** on Sept.28 (as third presenter in the second panel, at approx. 1h49m) and official transcript (including Questions & Answers) from the website of the ERRE Committee on Electoral Reform:

[http://parlvu.parl.gc.ca/XRender/en/PowerBrowser/PowerBrowserV2/20160928/-1/25631?Embedded=true&globalstreamId=20&startposition=28&viewMode=3&useragent=Mozilla/5.0%20\(Windows%20NT%2010.0;%20WOW64;%20rv:49.0\)%20Gecko/20100101%20Firefox/49.0](http://parlvu.parl.gc.ca/XRender/en/PowerBrowser/PowerBrowserV2/20160928/-1/25631?Embedded=true&globalstreamId=20&startposition=28&viewMode=3&useragent=Mozilla/5.0%20(Windows%20NT%2010.0;%20WOW64;%20rv:49.0)%20Gecko/20100101%20Firefox/49.0)

<http://www.parl.gc.ca/HousePublications/Publication.aspx?Pub=committeemeetingevidence&Acronym=ERRE&Mee=32&Language=e&Mode=1&Parl=42&Ses=1>

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**Ms. Ruby Sahota:** ... Have you looked at a specific example that you could give us, a simulation maybe from your riding or your region?

**Mr. P. Jeffery Jewell:** The first thing to know is that this proposal is strictly neutral and scrupulously fair to all voters, all parties, and all candidates, because it goes right back to the citizens' votes and because it's using only their uncoerced vote, which doesn't exist today. I think the Broadbent report said something like 40% of the votes are strategic votes. Who knows what those people really would have preferred to do?

I did do one number, as an example. With the Green Party having only one elected member, it became fairly easy to figure out. According to the last election, the number of votes that the Green Party got would be the equivalent of about 12 seats, so when Ms. May would vote in Parliament, she would have about 12 seats.

The people who are over-represented would probably have about three-quarters of a seat. They have less than one since they would be over-represented in Parliament because of the distortions of first past the post, which of course would not exist in the system I'm proposing.

...

**Mr. Nathan Cullen:** Mr. Kam, just looking through your notes, I don't know if you land on a preferred type of voting system, if you go between the proportional or the current system at all. Do you express a preference?

**Mr. Christopher Kam** [UBC, Assoc. Prof. Political Science]: No.

**Mr. Nathan Cullen:** You don't have one?

**Mr. Christopher Kam:** No, I'm choosing among flawed alternatives. I think the trade-offs between them is almost perfect. So what I get from one I lose from another and...

**Mr. Nathan Cullen:** Okay.

So the mandate of this Committee is to come up with something among these imperfections.

Here's my intuitive challenge. Mr. Jewell, I know you don't want to call it **weighted**, but it's the only way I can think of it. **MPs who are casting their vote in the House based on your system would have a different impact**, would have different significance on the outcome of any vote in Parliament. Is that correct?

**Mr. Patrick Jewell:** That is correct, but I would like to explain that. The party vote is exactly what it should be.

**Mr. Nathan Cullen:** Right. The final result is that if the Conservatives get 20% of the vote, they contribute to 20% of the vote.

**Mr. Patrick Jewell:** Let me retranslate my answer to your question.

If your party is under-represented, your '*weighted*' vote will be greater than one, as it were. If your party is over-represented, it will be less than one, but it will rectify the distortion.

**Mr. Nathan Cullen:** I'll just give you my impressions of that. I imagine that voters represented by people who have a greater weight to their MP's casting ballot will feel empowered, yet voters who have an MP representing them who's at 0.7 of a vote will not feel as great.

I know the goal you're aiming at. At an intuitive level, I could imagine people standing in the House of Commons and I could imagine voters saying, "You're my MP. I want you to vote this way." Elizabeth has 12 votes, I have 0.75 votes, and yet we're still members of Parliament. It feels odd, I guess.

**Mr. Patrick Jewell:** I'm glad you've challenged this aspect of it, but I'm pleased to respond to it, as well.

The first point you made, two minutes ago, was that people living in a riding where the outcome is a known conclusion have no reason to vote. In this system, every vote counts equally, period, all the time. It solves that problem.

As to what happens in Parliament, **you vote one vote**. The **computer says that you have 1.5 votes, 0.8 votes**, or whatever, but you don't see it. **You don't need to think about it**. The **citizen doesn't need to see it or think about it**. All they know is that **their wishes, as they expressed them in the election through their honest first-place vote, will be honoured with every vote in Parliament**.

...

**Mr. Gabriel Ste-Marie:** In other words, to elect someone, we are talking about a preferential system. You know that this system tends to reduce third parties and shift votes toward the more centrist parties. So it would widen the gap between the votes cast for each party and the number of members that represent them.

[English]

**Mr. Patrick Jewell:** That's a possibility, but another possibility is that, because the first-place vote is an honest vote, the third party candidate, as you refer to it, might get many more first-place votes than they do under the existing system. In any case, the first-place vote counts for that party regardless of how many members are elected.

**Elizabeth May:** I'm going to turn to Mr. Jewell, just because I really do need to understand your system better. It seems to me, it is perfect in proportionality, but there are other values we've been asked to look at, including **inclusiveness**.

I'm picturing myself here in the election. I'd certainly have the voting power to potentially work in a minority government to some greater effect, but I'm still just one person and I think I'm going to die. There are committees. There are amendments. There are debates. Of course, we'd also like to see greater proportionality in the House to be closer to the **gender parity** in real life in our society. Is there some way that I'm missing in which your system would increase the number of women in Parliament? I think I know the answer. It couldn't increase the number of people who are actually Green Party members working in Parliament, but would it do anything around **inclusivity** and **increasing the proportion of women or other unrepresented groups**?

**Mr. P. Jeffery Jewell:** Thank you, Ms. May.

First, I'd say again that the intent of this system is to be scrupulously fair to everyone. When we have a system that is fair, the thing that none of us can foresee is what the difference will be in the voter behaviour if they have a fair system. Therefore, I can't say that you will have more colleagues, but what I can say is that you are supremely disadvantaged in the existing system, and nobody really knows what the natural level of support for your party would be if there was an honest voting system. That's the first thing.

As to the matter of gender parity, I do have ideas on that, which I have elaborated on. I have about 30 documents on the website. Just to make it simple, I believe that the election after 2019 should be one where Elections Canada goes through a serious redistricting. One area to focus on would be to reduce the number of ridings in urban areas, because we will now have a system in which it is geography neutral or population neutral. It doesn't matter how many people are in any riding. Every citizen's vote counts the right amount, wherever they happen to be.

In the case of Mr. Cullen, you have a heck of a tough riding to handle. It's tough for you. It's tough for your constituents. I don't think that's a good use of the seats in the legislature. We have so many surplus seats in the urban areas, so I'm saying Elections Canada should be tasked to squeeze out some of those surpluses and reallocate them geographically, where it would provide better service and make your efforts easier.

As for females, there is no reason that we couldn't have, within an urban area, a district where there would be six seats, three of which could be reserved for male and three for female. Then you get gender parity by the design of the system and the candidates that the parties propose for it.

You can do the same for other diversity goals that you would have. Within the urban areas, there's plenty of potential to do much smarter things with the seats that we've got.

...

**Mr. Alexandre Boulerice:** Mr. Jewell, I would like to ask you a question. I heard the explanation of your system just now. We have not done this for a long time, but I would like to read you a question from Keith Spoons on Twitter. He asks you what would happen, under your system, if a party did not elect any members, but got 3% or 4% or 5% of the votes. You assign different weight to the votes for each member. There might still be the possibility of a party getting 6% everywhere in the country but not electing any members. In that case, there is no way to assign any weight, or not, to that popular vote.

[English]

**Mr. P. Jeffery Jewell:** Yes, thank you for the question.

That's what I was alluding to with the simple statement that "**some accommodation is necessary to avoid wasting votes for independent candidates or parties that don't elect anyone**". The possibilities I see would be to set a **threshold**, and that's a common thing in proportional systems. Set a threshold of 3%, 4%, or 5%, whatever it is, and if the party reaches that, then they are assured representation extraterritorially from a seat. It could be picked from the strongest defeated candidate or the leader of a small party, whatever.

You would have to do that. For the **independent** candidates, my thought was to have an **ombudsperson** type of idea where any of the otherwise unrepresented votes or independents would have some representation in a *non-partisan* form.