

**Brief Submission to the
Parliamentary Committee on Electoral Reform**

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Dear Committee Members,

Thank you for the opportunity to allow Canadians to participate in this important milestone in the evolution of Canada's democracy. I have watched all of the ParIVu sessions completed to date, and I am encouraged by the depth and range of perspectives that have been shared by both members and witnesses and have learned a great deal from the lively discussion. I also wish to congratulate the members for their candour and respectful conduct toward each other during these deliberations.

I wish to offer some thoughts on two matters that may help address some of the more salient issues that have surfaced from your sessions. In brief, the first pertains to *how we think* of electoral reform, in which I wish to highlight a particular type of fallacy that I see has permeated much of the discussion thus far. My intention here is to offer constructive critique to bring awareness to this fallacy for members to consider as the process moves forward. I am also of the mindset that it is not enough for one to offer a critique of something without also offering a potential solution. Therefore, the second matter pertains to *what we can do* about addressing this fallacy in which I present some ideas for an electoral system that has not yet been considered.

1) *How we think about electoral reform*

“We cannot solve our problems with the same level of thinking that created them”. Albert Einstein.

Although some may hold a perspective that *thinking* risks wandering into the abstract, it does have significant bearing on the more salient and practical matters of electoral reform. *What we do* about electoral reform is a reflection of *how we think* about it. In this vein, I am encouraged by the many ideas presented and the members' enthusiasm for thinking outside the box, and I am particularly intrigued by the reference Ms. Flumian made to our governance system being like an *ecosystem*.

The ecosystem concept has garnered much attention in recent years as a useful metaphor for many types of human organizational systems. My perspective is that it is *not just a metaphor*. The prefix *eco* means *house*. As it was originally defined, the word does not pertain only to biological or natural ecosystems, but of the systemic interaction of structures and functions of any living domain that may be considered a *house* or *home*. It therefore translates more simply as a reference to a *house-system*, and we can draw some valuable insights from this idea on *how the house works*.

There are a number of properties of ecosystems that may help frame the discussions on electoral reform, some of which speak directly to the more contentious issues raised by members of the committee. It is important to recognize that there are different *types of systems* with different *levels of complexity*. They are generally identified as: 1) *simple systems* (like a bicycle), 2) *complicated systems* (like a manufacturing plant or an airplane), 3) *complex systems* (like climate, the economy or system of governance), and 4) *chaotic/disordered systems* (any one of the first three if and when they break down).

Formal ecosystems theory tells us that components of ecosystems may exhibit qualities from each of these levels depending on specific structures and functions, and their particular state at a given time and location. On the whole, ecosystems are complex systems that *self-adapt* to environmental changes and can, when necessary, regenerate through successive *cycles of breakdown and renewal* to new structures and functions that correct for the problems that lead to the most recent breakdown. I think these ideas may help shed some light on three particular issues the committee is confronted with.

a) First, a time for renewal. The state of governance in Canada in recent years very much reflects this ecosystem renewal process. As many politicians, the public and the media have observed, parliamentary conduct has reached a state of dysfunction/dis-order, which is arguably rooted in the FPTP system as a primary causal factor. Because the FPTP system allows a party with less than 40% of the vote to obtain 100% of the power, parliamentary conduct has become more of a power struggle than it is a house for managing the affairs of our vast country. As it is, the FPTP system can no longer function appropriately in today's society where the mass media is used more to misinform Canadians about the

other parties, than for constructive public debate on important matters. This signifies the need for change to a new structure for our time where the multi-faceted flow of *information* is now major currency in all matters of politics and public life. Canadians know this. They are no longer just recipients of information from authoritative sources, rather, are full participants in its construction, dissemination and use. Governance is now confronted with new challenges associated with the new information era and the committee needs to take this into account in its consideration for renewal of the electoral system of Canada.

b) Second, complex systems. As Hon. Monsef emphasized in her opening remarks to the committee, electoral reform, and the work of the committee, will be a *complex process* in and of itself. The complexities she was referring to have certainly come to light through the many, sometimes competing views, theories and evidence offered by the expert witnesses in their respective areas of research. Yet some committee members are also correct in reminding us that most Canadians do not think in terms of complex systems, rather they prefer simple *yes/no* types of questions and answers. What is needed is a *voter-centric* approach to a re-design of our electoral system that is simple enough for voters to understand and use, yet complex enough *under the hood* to handle the more intricate elements of whatever type of electoral system is most appropriate. This presents a significant challenge.

One means of approach may be to consider, as an analogy, the complexities of today's cell phone and internet technologies. We all know that the technology that drives the internet is a complex system. But the reason it has grown astronomically over the last decade is because of the increasing ease of use of the *user interfaces* that we use to interact with this technology. They are *simple interfaces to a complex system*. The designers of these interfaces use what is sometimes referred to as 'ecological interface design' principles, which is another ecological metaphor that puts *user experience* at the center of the design process, and leaves the complexities of the technology to the experts to meet the users needs. It is ecological in the sense that the complexities of the technology *evolve and adapt* as users needs and behaviours change.

If governance is an ecosystem, then it may helpful for committee members to think of their role as a *design team*, wherein their task is to build a simple interface¹ between voters and a more complex electoral system that corrects for the flaws of the outdated FPTP system. This idea is reinforced by Dr. Pilon in his recommendation that the complexities of the various PR systems are not what the public should be directly consulted on, rather it is what voters *value* in an electoral system (such as whether they believe every vote should count or not). The interface needs to be voter-centric, and the more complex aspects of the electoral system be addressed by experts to meet the needs of voters based on what they value.

c) Third, an 'ecological fallacy'. In direct terms, an *ecological fallacy* pertains to making incorrect inferences and assumptions about individuals or a population at a particular geographical level or scale (e.g. at a District level) using data aggregated into a higher geographical level (e.g. National level). Where this plays out in the discussions and PR design considerations is how voting results at the district level are aggregated into the national level to determine what proportions of votes should be used to allocate seats in parliament. Aggregating voting results for this purpose is not the main problem. The fallacy is in assuming that the proportions aggregated at the national level are *representative of voting preferences and patterns uniformly at the district level*, when in fact, there remain wide variations both within and among districts and regions. The fallacy is committed in the assumption that the proportional representation achieved in Parliament, by any form of the PR systems currently being considered, will function equally well for all regions of the country.

To address this issue, it first must be understood that the problem is not with aggregating the proportions at the national level; rather, it is in *not maintaining the linkages* to the diversity of proportional representations at the district level to enable a more fully functional representative democracy that voters feel they can participate. In the current FPTP system, and in the PR systems under

consideration, once the voting results from the district level are aggregated at the national level, they are no longer used. Although not readily apparent, not accounting for this may lead to a continuation of voter dissatisfaction, low voter turnout, and national-regional tensions². The diversity of regions across Canada should not be underestimated or over-simplified³. Issues that matter to Canadians are often associated with where they live, with *livelihood and sense of place* being of equal or at times of greater value than population size or the economic opportunities provided in their region. A new electoral system must therefore find some means of balancing national unity with regional diversity and life circumstances.

B) What We Can Do – a Hybrid FPTP/PR Approach

“Always make things as simple as possible, but not simpler”. Albert Einstein

It seems fitting that Einstein provides us another interesting quote that can be used for guidance. The interface between the voter and the electoral system must be simple enough, but not too simple in that it compromises the needs of both voters and the governance ecosystem. The choices available are currently thought to be one of two options between the current FPTP system, or some form of PR system. This presents an either/or situation that is creating tension among some members of the committee, which may also be shared among a significant proportion of voters. This is particularly the case with respect to the referendum question. However, there is a third option that is not an ‘either/or’ choice, but a combination of the two systems that draws upon the advantages each has to offer while negating their disadvantages. It is essentially a hybrid FPTP/PR system that I tentatively refer to as **Multi-Member ‘Voting Power’ (MMVP) system**. Figure 1 provides a graphical comparison of the main elements of each of the three options.

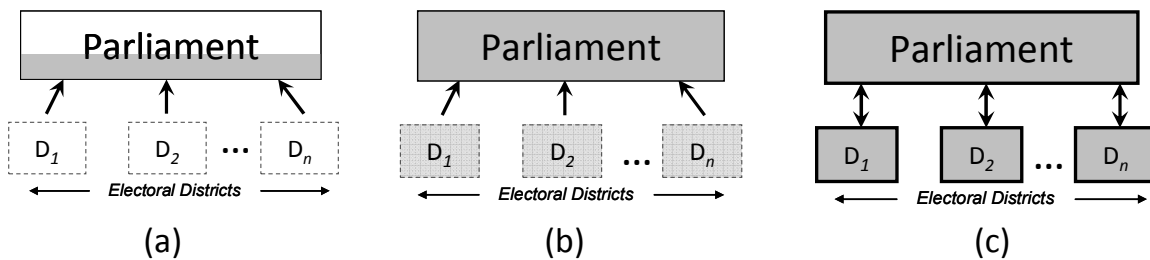


Figure 1. Graphical illustration of three options for electoral reform: (a) the current FPTP system, (b) one of the available PR systems (or some variation), and (c) a hybrid FPTP/PR system comprised of multi-member districts based on voting power (MMVP). Each option considers how Canadians would vote at the district level (lower boxes denoted D_1, D_2, \dots, D_n), how their votes translate into parliamentary structure and function (top boxes), and the type of linkage (unilateral or bilateral) operating between regional and national levels (arrows). Grey shades symbolize the degree of proportional representation in each option.

Option (a) is simple to understand in terms of how people vote, and for which Canadians are long familiar. But it is *too simple* for the needs of our time, as it creates a disproportionate allocation of power in parliament that is not representative of how Canadians voted, nor do decisions and actions reflect the diversity of viewpoints and circumstances of Canadians. There is also direct linkage maintained between voting results and parliament other than the aggregation of results to determine representation in parliament.

Option (b) would allow for a system proportional representation at the national level, but may result in a system that is *too complex* with respect to the structure of parliament and electoral districts, and especially too complex for voters to understand. Each PR system currently being considered imposed

high degree of complexity onto voters, and if complicated further by changes in electoral boundaries, would require significant time and effort to educate the public on the chosen system. A significant amount of time and expense would be required to educate the public on multiple options should it be put to a referendum. Even after such effort, there would be no assurance that voters would be as informed as they need to be, nor may public support be sufficient enough to increase voter turn-out and improve democratic participation.

Option (c) presents a hybrid system that combines elements of both the FPTP and PR electoral systems. The way it would work is as follows:

- Canadians vote for their preferred candidate as they currently do, or something very similar to what they are familiar with (this is discussed further below). This would not require any major changes to the voting process we now have in place, and there would not be any need to change the current electoral boundaries. It would also relieve Elections Canada considerable burden in implementing a new system in time for the next election.
- The key difference is that the actual proportion of votes received by candidates at the district level would be used as the basis for determining their corresponding *Voting Power* in Parliament, wherein each district would be represented by three MPs: a *Lead MP* and two *Associate MPs*.
 - The *Lead MP* is the candidate with the highest percentage of votes and *Associate MPs* are awarded to candidates who place 2nd and 3rd in the proportion of votes in their district.
 - The Lead MP will hold the seat in parliament, and be the full-time sitting MP in Ottawa, whereas the Associate MPs will serve on a part-time basis from their home riding⁴. There will be no need to change the current number of seats, nor the number of electoral districts and boundaries.
- There are two ballot options for determining the rank of the three members:
 - 1) Voters select only one candidate (their preferred candidate), as they currently do, and the three MPs are determined by the 1st, 2nd and 3rd place results⁵; or
 - 2) Voters rank their preferred top 3 candidates, and the three MPs are determined by rank method.

The resulting vote proportions are used to determine the *Voting Power* that each MP has in parliament. The Lead MP will submit his/her own vote preference along with those of the Associate MPs for a total of 100%. On any matter that is brought to a parliamentary vote, the Lead MP would be required to consult with the Associate MPs. This would stimulate more discussion and consultation on district level in determining the implications for their constituents; hence, the bi-directional link between voters and Parliament is maintained by including the perspectives of the Associate MPs for which voters supported in their district. This would introduce a new dynamic in parliamentary voting, and in partisan power dynamics because the vote proportions by seat may vary on an issue-by-issue basis.

To illustrate how this would work, several scenarios are presented in Table 1. In scenario A, the weight of the vote of the Lead MP (if for example, he/she won 45% of the vote), would only be 45%. If the Associate MPs wish to vote the opposite, their combined weight would be the remaining 55%, resulting in an overall 45/55 Yes/No split. Scenarios B and C show two other possibilities of split votes. The three MPs may also decide to vote in unison offering 100% support for, or against, in scenarios D and E respectively. The total vote in the house would be the net sum of all Yes/No proportions for all seats, which is directly proportional to how Canadians voted at the district level (not the aggregate proportion).

Another benefit is national parties would be strengthened by maintaining at least some proportion of representation in many (if not most or all) districts throughout the country, including districts for which they do not have a Lead MP. Additionally, having three representative MPs would be beneficial to both urban and rural and northern districts for different practical reasons.

Table 1. Example voting scenarios for a hypothetical electoral district under a MMVP system.

Voting Scenarios					
	A	B	C	D	E
Member 1 (45%)	Yes	Yes	Yes	Yes	No
Member 2 (35%)	No	Yes	No	Yes	No
Member 3 (20%)	No	No	Yes	Yes	No
Yes/No Vote	45% / 55%	80% / 20%	65% / 35%	100% / 0 %	0% / 100 %

MPs representing larger urban areas need to serve communities that have *higher population density*, whereas for rural and northern districts there are *more communities* to serve that have significantly greater distances between them, which require more travel time and scheduling logistics that can be shared among three MPs. Other benefits with the MMVP system are provided in the summary section below. The next section looks at how the voting power with the MMVP system can be used to determine the governing structure of parliament.

Governance

Whereas the voting power derived from the results at the district level represents the PR component of the MMVP system, the FPTP aspect is retained in determining the governance structure of parliament. For this, two options may be considered:

1. The party that *wins the most seats* will be the governing party, and the 2nd and 3rd place parties will form the opposition (as is the current FPTP system), or
2. The party that *wins the higher proportion of votes* (most voting power) will be the governing party, and the 2nd and 3rd place parties will form the opposition (a modified FPTP system wherein it is not the first past the *post*, but first past in *voting power*).

The first option maintains the current governance structure that Canadians are familiar with, but in contrast to the current FPTP system, the actual balance of power is represented by *voting power* which is directly the proportion of the national aggregate of votes the party received. Because the power a party brings to parliament would no longer be based MPs carrying 100% of the vote, the voting power per seat is variably fractional. It is therefore possible for the governing party (that won the most seats) to have less overall voting power than an opposition party. In the second option, the converse may be the case, where the governing party may have fewer seats (but more overall voting power) than an opposition party. In either case, the proportional allocation of voting power would likely change on an issue-by-issue basis whereby the votes submitted for each district (on behalf of the Lead MPs), would be the result of a combination of the three representative MPs that consider balancing national and regional interests.

With regard to agenda setting, we may consider how the platform of governing party could be used as an initial template which could be modified in accordance with concessions made with other parties. This would encourage the parties to work towards a consensus-based dynamic on either an agenda level, or on an issue-by-issue basis. The partisan system would be maintained to reflect their respective political philosophies and values, and provide a balance of national and regional interests, while at the same more directly represent the values of Canadians as expressed in their votes.

By whatever scenario, the parliamentary governance structure will need to adapt to how Canadians voted with each successive election, and I believe this will make Canadian politics one of the more interesting systems for political observers, the public and other nations around the world to observe more closely.

Summary

- Canada's system of governance is likened to an evolving, and dynamic ecosystem, of which its electoral process is an integral part. The current FPTP system has outlived its usefulness and requires changing to a new electoral system that better represents the diverse range of values among Canadian voters.
- A number of PR systems currently in use are being considered; however, Canada's vast territory and cultural, social, and economic diversity present challenges to their practical implementation, particularly in regard to balancing national and regional interests.
- Whatever system is used to replace or modify the current system will necessarily have more complexity, and be simultaneously simple enough for Canadian voters to understand and want to participate in more fully.
- The new system also needs to be implemented for the 2019 election, which presents additional scheduling, logistical and financial challenges.

Key advantages of the MMVP approach include:

- A Made in Canada solution suited to Canada's cultural, social, economic and geographic diversity
- Easy for voters to understand and use, and which will require less public education than the alternative PR systems currently being considered
- Maintains a multi-partisan structure with proportional representation that balances both national and regional interests and issues, and strengthens the national party system by increasing active representation at the district level
- It encourages consensus-based decision-making in both Parliament and at the district level that will increase in active participation and social cohesion among Canadian voters
- An MMVP system can be implemented in time for the 2019 election, with little additional cost. No changes would be required to current electoral district boundaries, nor will public consultations on electoral boundary changes be required. This significantly reduces scheduling, financial and logistical burden for Elections Canada
- Enables voters to feel more directly connected by ensuring their votes count; they have more direct access to representation in their districts; and if desired, access to alternative representation other than the party or candidate for which they voted
- Election results can still be counted and finalized on the night of the election (no long delays or multiple rounds of voting required)
- National parties will retain some level of representation in most if not all ridings, thereby strengthening the national multi-partisan system

Sincerely,

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PhD (Geography)

Endnotes

¹ Although I am using a computer analogy here, the use of the term ‘interface’ does not imply that the new system would be an on-line or electronic voting system. Currently, and most likely for the 2019 election, the ‘paper ballot’ should be seen as the ‘interface’. Although, the concept could be easily extended at a future time to the design of an on-line voting system, or other electronic voting systems, when security issues can be resolved.

² It is worth noting that in terms of national-regional tensions, by *region*, we may not be referring only to regions as clusters of districts that are in close proximity with each other geographically (e.g. Western or Atlantic regions), but it may also refer to regions throughout Canada that share particular affinities such as resource-dependent communities, agricultural regions, coastal communities, or the larger urban cores.

³ The urban-rural dichotomy is an example of such over-simplification when based solely on population size and density. Although political scientists and economists continue to use these terms in this context, geographers have long since adopted other community classification systems that account for other factors such as economic structure, physiographic region, proximity to core economic centres, cultural diversity, etc.

⁴ I acknowledge this raises questions about salary and other operational costs for MPs, and may present a challenge in educating Canadians on the costs and benefits of this approach. For sake of argument, let us assume that the MP salary costs would approximately double the current level. One scenario might be in assuming the current MP salary is in the \$125-150k range, the associate MPs could be compensated on either stipends, or a half-salary of \$75k (or something similar). There are many possible scenarios and this can be left to the experts to work out. The benefits, however, are that Canadians will have 3 representative MPs, whereby two will be locally accessible and would relieve the sitting MP of some of the effort required to maintain contact with constituents. Whereas each district has roughly 80,000-100,000 citizens, the ratio of representation would drop from 1/100,000 to approximately 1/33,000 per MP (1/3rd), while only doubling the costs. Additionally, because voters do not need to disclose how they voted, they also have the option of access to alternative representation should they have the need.

⁵ In this option, if there are more than three candidates, the total percentage of the top three candidates will be something less than 100% (whatever the difference is from the remaining candidates). The proportions of the top three candidates would be recalculated based on dividing their initial proportion by the net proportion of the top three, which would increase the relative proportion of each winning MP. A deficiency of this option is that voters who voted for one of the candidates that did not rank as one of the top three candidates may feel their vote did not count. It is therefore assumed that at least one of the top 3 candidates would be able to represent their interests and values given that there is more diversity of political representation by having three MPs instead of just one. If this is not satisfactory, the 2nd option where voters rank their top 3 candidates is presented for consideration.