

# **Cybernetics in Canadian Governance and Democracy**

**A Submission to the Special Committee of Electoral Reform**

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## **Summary**

In my considered opinion, our current and urgent need for the reform of our democratic institutions is really being driven neither by an urgent need to make government and political system more democratic (although clearly it now promotes the election and operation of a moderately authoritarian and not particularly democratic government) nor is really being driven by an urgent need for electoral reform (although electoral reform is a necessary element of that institutional reform). It is really being driven by the need to define an electoral system and a Parliamentary system that can work more productively toward resolving the apparently intractable problems now facing Canada in a manner which reflects a democratic consensus of the Canadian electorate.

Cybernetics is the study of feed back in systems, like the governor on the engine of a farm tractor which adjusts power to the varying load which the tractor experiences or the cruise control on an automobile which adjusts power to match varying road conditions, hills, etc.

The fundamental cybernetic issue in Canada’s governance is the excessive or hyper-sensitivity of the relationship between large relative partisan results to even small changes in relative voter support. Two situations in Canada’s history where important issues had to be removed from a partisan context will be described and evidence, primarily the Samara Canada study, “Tragedy in the Commons,” will be reviewed. This presentation will conclude with recommendations for electoral reform which will reduce that hyper-sensitivity.

## **General**

The perspective of this presentation is that there is a serious problem with Canada’s governance, including, but not limited to, Canada’s electoral system, a problem with which politicians and others have been aware since before Confederation but which politicians have not often identified clearly. This problem is the inability of a highly partisan Parliament to deal with complex and potentially divisive issues.

This is a problem which will become increasingly important as governments of all stripes must deal with increasingly difficult issues in an increasingly complex world. An open and adult evidence based consideration of how to deal with, for example, climate change and the economy is urgently needed. A similar consideration of both social justice and criminal justice issues is desperately needed. Security in a world where violence is perpetrated by non-state rather than state actors confronts us. In each of these areas, that consideration must go beyond the scope of any one political party's platform.

## **A Brief Discussion of Cybernetics**

In order to deal the question of electoral reform, it seems helpful to create a perspective or prism through which we can view and assess alternatives. My judgement is that useful perspective can be found in the study of cybernetics.

Cybernetics is the science of communications and control systems in systems, both machines and living things.

While few people think consciously of cybernetics, its most basic principles are commonly understood.

The purpose of the cruise control system is adjust the power of the engine to maintain the selected speed. When, for example, on hill, the automobile begins to lose speed, a properly functioning cruise control system increases the power to maintain the selected speed. After cresting the hill, the cruise control system, as the automobile begins to pick up speed, reduces the power to keep the automobile at the selected speed.

If a second automobile with the cruise control speed set for 100 kilometres per hour (kph) started up a hill and when the speed dropped to 95 kph and the cruise control system increased to power such that the automobile accelerated to 150 kph, we would have no difficulty in concluding that the cruise control system was defective. Similarly, if an automobile with the speed control set for 100 kph started down a gentle grade and accelerated to 105 kph, and the cruise control system reduced the power such that the speed dropped to 75 kph, we again would have no difficulty in concluding that the cruise control system was defective.

Voting is a communication and control mechanism and can be analyzed in much the same fashion as the cruise control system in an automobile.

## **The Cybernetics of the Electoral Process as seen by Political Parties**

The electoral system in a democracy is a system to adjust the number of seats in Parliament as the voters' preferences change. In a correctly functioning cybernetic electoral system, one might reasonably expect that if a political party's support changes, the change in the number of seats that party wins should at least approximately reflect the change in its support. If a party loses 10 per cent of its support, we might reasonably expect that it would lose about 10 percent of the seats held. If a party gains an additional 10 per cent support of the votes cast, we might reasonably expect that it would win about 10 per cent more of the seats.

We might expect those outcomes, but we would be wrong. With our current First Past The Post (FPTP) electoral system, even if a party receives just less than 40 per cent of the votes cast, it can still win about 60 per cent of the seats in the House of Commons. This phenomenon is well known and well understood and is not in question.

But from a cybernetic standpoint, the cruise control of elections is certainly as defective as that of the second automobile described above. This is profoundly undemocratic, but there is more.

## **The Cybernetics of the Parliamentary Process as seen by Political Parties**

If one party wins 55 percent of the seats in the House of Commons, it is effectively close to an elected dictatorship, in that the will of that party can be inflicted on the House as a whole. If another party won most of the remaining 45 per cent of the seats, it would be able to criticize and complain but not much more. This phenomenon is well known and well understood and not in question. But from a cybernetic standpoint, the cruise control of power in the House, the Parliamentary process, is also as defective as the cruise control of that second automobile.

## **The Cybernetics of the Canadian Governance System as seen by Political Parties**

So a relatively small change in the popular support for a political party usually results in a much larger change in the number of seats won by that party, frequently moving that party from the powerlessness of opposition to the overwhelming power of a majority government. We should not, therefore, be surprised that

politicians work constantly and energetically to secure and/or maintain that margin of support. They do so not because politicians are bad people - indeed they are not - they do so because the system as it exists makes it necessary for them to do so.

In cybernetics, systems which respond more than is appropriate may be described as “sensitive” or even as “over-sensitive.” When two “over-sensitive” systems operate together as our electoral and Parliamentary systems do, the resulting overall system might be described as “hyper-sensitive.” Canada’s governance system, the combination of its electoral system and its Parliamentary system is “hyper-sensitive,” so “hyper-sensitive” that its ability to perform in difficult situations is seriously compromised.

That Canada’s governance system should be viewed in cybernetic terms at all may not fit comfortably with traditional perceptions of political science but cybernetics is an instructive perspective. That Canada’s governance system should be described as so “hyper-sensitive” that its ability to perform in difficult situations is seriously compromised is an hypothesis that, in the spirit of “evidence-based decision-making,” be challenged rigorously.

### **Is Canada’s governance system so “hyper-sensitive” that its ability to perform in difficult situations is seriously compromised?**

There is strong historical evidence to suggest that this hypothesis is and has long been true. Indeed, history provides us with at least two specific examples of very challenging problems which can help illuminate our current discussion.

### **An Historical Example of a Problem - Pre-Confederation**

Conservative leader John A. MacDonald and his Quebec colleague, George-Etienne Cartier, faced the situation of a pre-confederation indecisive House which could not effectively deal with matters related to the United Provinces of Upper and Lower Canada, let alone the danger of an increasingly militant United States as the American Civil War proceeded towards a conclusion. MacDonald’s solution was to lead a coalition government with Cartier and Liberal George Brown to craft a Canadian Federation.

The collaborative government was able to succeed, first, because it was able to get the best ideas from the members of each of the political parties and, second, because it did not have to face the intense and continuing partisanship of the time

as each political party maneuvered to retain the electoral support of its supporters. Thus, the coalition was able to negotiate complex trade-offs on issues of contention. The resulting program to seek a wider confederation was a test of confidence for the coalition (a test which it was able to pass) but it was not a test of confidence for either the Conservative or Liberal parties, a test of confidence which probably neither party could have passed had the program being put forward had been proposed as a proposal of either party alone. In short, while the confrontational model of Parliament that had been the norm had been successful in the relatively monolithic society of either Upper Canada or Lower Canada, it was not able to succeed in the more diverse societal setting of the United Provinces.

After Confederation was achieved, the traditional party system reasserted itself, a matter to which we will return later.

## **An Historical Example of a Problem - Post-Confederation**

A century ago, Prime Minister Robert Borden saw as important the need to increase the strength of Canadian armed forces to conclude the Great War and saw conscription as necessary to do so. Calling a General Election in 1917, he campaigned, not as leader of the Conservative Party as he had been, but as the leader of a collaborative group identified as Unionists. The Unionists comprised a mix of both Conservatives and Liberals but was not a coalition of those parties.

The Unionists received almost 60% of the popular vote, the highest percentage ever received by a party in any Canadian general election, giving Borden the support he needed to deal with conscription.

Again, while the confrontational model of Parliament that had been the norm for the first half century of Confederation had been successful, it was not able to succeed when challenged by the more divisive issue of conscription. The Unionist party weakened after the conscription issue had been resolved and the traditional party system again reasserted itself in the next election cycle.

In short, our history not only gives us two illustrations of a collaborative model for our future, but illustrates the weaknesses of that model - its unsustainability under the current electoral system.

## **More Recent Evidence about Canadian Governance**

More recent evidence is provided in the excellent study, “Tragedy in the Commons,” by Alison Loat and Michael Macmillan of Samara Canada (published by Random House Canada) who interviewed eighty retiring and/or defeated Members of Parliament. In their exit interviews, Alison Loat and Michael MacMillan found that “save for two former NDP MPs, no one recommended electoral reform or proportional representation” (page 219). But Loat and MacMillan go on to write: “As well as discussing changes to Parliament, the MPs were eager to discuss changes to the entity they felt created the real problems in Ottawa: their own political parties. The MPs wanted to see the centre of power move from the political party leadership back toward the MPs themselves.” They quote Reform-turned Liberal MP Keith Martin, “The tragedy of the Commons is that the public good is sacrificed on the altar of short-term political gain.”

These departing MPs were describing approximately the same dilemma that MacDonald, Cartier and Brown faced a century and a half ago and that Borden faced a half century later, except we have neither been recognizing the solution that these individuals had to adopt nor have we been recognizing why their solutions were only temporary. It is the same dilemma that you and your committee must resolve now if you and it are to make a contribution to Canadian governance.

## **A Contemporary Analysis of Decision Making**

There is also a strong philosophical and logical basis for what these MPs were describing. Dr. David Weinberger of Harvard's Berkman Centre for Internet and Society, wrote in his book, “Too Big to Know,” that the increasing amount of data to which we have access has made us know less, not more, with certainty and asserts that, in a room full of smart people, the smartest is actually the room itself. By this he meant that a room full of smart people, working together, could develop a smarter result than any individual or group in the room.

What Canada needs is for the House of Commons to be, in Dr. Weinberger’s terms, a “smart” room, smarter in terms of the national interest than it is now and smarter than the historical confrontational Westminster model can be.

## **Moving to a Smarter Commons**

In their book, “Tragedy in the Commons,” Alison Loat and Michael Macmillan quote (page 223) the distinguished journalist Andrew Coyne, “How can we reform politics? And the answer is: we can’t. There are very few institutional changes that would do any good, and whatever would has no chance of being enacted. We’re not going to change politics until we change the culture. . . . And we’re not going to change the culture.” Loat and MacMillan go on to write, “We hope Coyne is wrong.” And so do I.

If the political culture of Canada is driven by the hyper-sensitive cybernetics of Canada’s governance system, it can only be changed by changing the cybernetics of that system. Since a major driver in the cybernetics of governance is the cybernetics of the electoral process, change in the political culture of Canada must begin with change in the electoral process. The collaborative atmosphere of 1864-67 and of 1917-1921 evaporated as the existential threats that Canada had faced were passed because the cybernetics of governance had not been changed.

So how can the cybernetics of the electoral process be attenuated to a more appropriate level? First of all, the electoral process must be designed so that the electoral result more accurately reflects voter intention. If forty per cent of the voters chose one party, then that party should get about forty per cent of the seats, not fifty to sixty per cent nor twenty to thirty per cent. Only some system of proportional representation can give such a result. The current FPTP system clearly does not give such a result and it is not likely that any preferential or ranked ballot system will give a result that is much more representative than FPTP result nor one that is much less sensitive.

**Conclusion No. 1: Only a proportional representation system can reduce the hyper-sensitivity of Canada’s governance system to an appropriate level.**

It is important to distinguish between elections where candidates are stratified by political party and those where they are not.

In national and most provincial elections, most candidates are identified with a political party. Hence, voters may reasonably assume that each candidate subscribes, at least broadly, to the values, aims, and platform of her or his party. It is not perfectly clear to what extent any voter, when casting their or his ballot, is supporting the candidate on the candidate’s own merit and to what extent she or he

is supporting the candidate's party and sees the candidate simply as a placeholder for that party. In some jurisdictions, voters are offered a double ballot on which the voter may choose separately a candidate and a party. This mechanism clearly separates candidate choice and party choice but allows the voter to escape the consequence of his or her choice, for example, by choosing a candidate known to be frugal and a party known to favour spending or vice versa.

**Conclusion No. 2: When candidates are identified by party, a single choice ballot signals voter intentions more accurately than a double ballot.**

On the other hand, where candidates are not stratified by party, as in most municipal elections, a preferential or ranked ballot system is to be preferred, particularly when there are several candidates running in each electoral district (ward, etc.). It seems inappropriate if not undemocratic that candidates might win election with less than thirty per cent of votes cast.

**Conclusion No. 3: Electoral districts where candidates are not identified by party be encouraged to use preferential or ranked ballot systems.**

Since Canadian voters voted for a true majority only six times in the forty-two elections since confederation, we should not be surprised if majority governments become rare in the future. We note that the party electing the largest number of members in five of these elections received only between fifty and fifty-five per cent of the votes cast. In 1917, Prime Minister Borden's Unionist group (consisting of both Conservatives and Liberals) received less than sixty per cent of the total votes cast.

The Canadian Constitution is completely silent in respect to political parties. Confidence, for example, is not now nor ever has been associated with party - it has been and still is associated with the Ministry (Cabinet). While the Ministry will and should remain the locus of decision-making and responsibility, the locus of substantive discussion and debate should increasingly become the Commons and its Committees rather than the caucuses of any party including the party of the government of the day.

**Conclusion No. 4: The Committee should consider mechanisms for the development of multiparty or cross party cabinets.**



## Some Closing Thoughts

1. It is possible to analyze and describe the cybernetics both of the several alternative systems for proportional representation and of the several other issues which such an electoral change would raise but it is not so within the three thousand word limit for this submission (which I have already exceeded by nearly fourteen per cent). Even submission rules create their own cybernetics. I look forward to the opportunity to develop and present a more comprehensive analysis.

2. I am convinced that the reform of our democratic institutions is not only desirable but necessary, but I do not find your committee's task is not an enviable one. As Machiavelli pointed out in the "The Prince" five centuries ago, "It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order, this lukewarmness arising partly from fear of their adversaries, who have the law in their favour; and partly from the incredulity of mankind, who do not truly believe in anything new until they have had experience of it."

3. The better decisions that Canada needs will depend on more objective assessments of situations than those we have too often seen in the past. By comparison, we certainly would not have seen the great advances in science that have occurred if science were not pursued with more objectivity than policy in politics. But as, Thomas Kuhn pointed in in his 1962 book, "The Structure of Scientific Revolutions," even scientists themselves are not always totally free of bias in their thinking. He documented that scientists on a number of occasions had gone to remarkable lengths in devising extensions of diminishing intellectual weight to support existing theories until those theories collapsed in favour of a new hypothesis which better explained the body of evidence.

4. In the same fashion, we should not be surprised that practicing politicians and political scientists will go to considerable lengths to defend the current political paradigm and electoral system until a new paradigm that better explains the past and present and points to a better paradigm and electoral system is proposed. We need a new paradigm for political reformation, and perhaps cybernetic analysis will form a key element of that paradigm. Machiavelli's caution is still appropriate but the potential consequences of not proceeding make your efforts all the more worthwhile.