Experimental Electoral Reform: Towards Evidence-Based Decision Making

A brief submitted to Canada's *Special Committee on Electoral Reform*

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The House of Commons special committee on electoral reform (the Committee) is tasked with identifying alternatives to the first-past-the-post system that 1) is perceived as fair, 2) encourages more Canadians to cast their vote, 3) is accessible to all Canadians, 4) functions with integrity, and 5) connects local concerns to national policy. Truly this is no easy task, and undoubtedly the Committee will be met with many excellent and competing ideas from which they must select the most viable.

Solutions put before the committee will rarely achieve the status of a true solution as they are, largely, based on guesswork. Guesswork comes in many forms, and these variations will become apparent once recognized. Blatant guesswork takes the form of suggestions that encourage the Committee to abandon all current practices and embrace radical systems that have, at best, aesthetically pleasing explanations and justifications. Luckily, such blatant guesswork is almost never accepted by majority vote. More deceptive is the guesswork derived from regional comparison. Regional comparisons will often argue that because System X worked in Country Y, Canada should adopt these practices. As we will demonstrate in our analyses below, such a system is untrustworthy and represents a risky gamble. To be blunt, Canada is not Country Y, or Z, or any other country, and therefore any suggestions for policy change needs to be made with respect to Canada's unique constituency, legalities, and other important contextual variables related to voting (e.g., current economic affairs, political party system).

The concern shared among all proposals before the Committee is that they suppose a solution to a problem, though the problem has not actually been identified. The problem is not that first-past-the-post is flawed, nor is it that we do not have a viable alternative system; the problem is that we do not understand well enough the conditions under which voters will readily turn out to vote while retaining the belief that the voting system is ethical, fair, and represents

Canada's best interest. Let us take, as an example, the issue of compulsory voting laws adapted

from Lang and Witts (2016).

Regional comparison analyses of compulsory voting are presented in Figure 1 and Figure

2. These analyses center on: (i) *registered voter turnout* (i.e., the number of citizens that casted a

ballot during a parliamentary election divided by the number of registered voters within the

nation) and (ii) *estimated eligible voter turnout* (i.e., the number of citizens that casted a ballot

during a parliamentary election divided by the estimated number of eligible voters within the

nation). Each of the 42 assessed nation's voter turnout data are presented as a condensed-line

graph (i.e., condensed multiple baseline across nations design; see Barlow et al., 2009). Bolded

elections and data paths between elections represent elections with 80% or greater voter turnout.

These graphical adjustments allow interpreters to very quickly assess whether nations observe

high (i.e., 80% or greater voter turnout) or low voter turnout (i.e., 79% or lower voter turnout).

Statistical analyses of estimated eligible voter turnout found no significant difference

between systems or countries on voter turnout; however, statistical differences of registered voter

turnout were found between compulsory and non-compulsory nations, but not within nations that

have recently changed their compulsory voting laws. Visual analysis confirms these results and

suggests that within and between nations compulsory voting reform is at best a gamble. It is not

that compulsory voting doesn't work—indeed it does for some nations—it is that each nation is

unique, and it is this uniqueness that determines if the reform is successful. Furthermore, the

analysis suggests that nations change as their political, social, and economic climate changes,

and thus the longevity of any system based on guesswork is destined to fail at some point.

Consider that a) comparisons between regions are at best generalizations, b) large-scale

interventions prove incapable of identifying idiosyncratic motives for voting, and c) broad policy

change in the absence of carefully-planned local experimentation will leave the voter wanting of

input and control over the system.

The problem, then, is that we do not fully understand the problem. Careful empirical

analysis and experimentation will remove the guesswork and position Canada to move forward

without the necessary gambles inherent in these other proposals. To understand how to enact

non-risky reforms, one must first understand the variables that influence voter turnout and voter

confidence in any electoral system. It is to this analysis as a first solution that we now turn.

Solution

Based on our training and current investigations into voting behavior, we propose an

alternative to the alternatives with an approach that eliminates the guesswork involved in public

policy. We propose that electoral reform be viewed at all times as a political experiment where

local voting reforms are altered systematically to identify those elements that do and do not meet

the above-mentioned 5 criteria of a successful voting reform measure. While our approach is

perhaps more time-consuming, it is without a doubt more sound. Quick changes to public policy

are always a gamble, and can be disastrous. Outcomes of rapid alterations to policy can easily be

manipulated to show a preferred effect to stakeholders, and thus the losing gamble can go

unnoticed for years. However, an experimental attitude is by necessity transparent, humble,

iterative, and self-correcting. We argue that careful assessments, similar to that found in

arguments from guesswork in regional comparisons, are a worthy pursuit. However, careful

assessments can only be of use when it is informed by experimental analysis. Through

replication and individual analysis, based on the experimental methods of single-case research

(see Barlow, et al., 2009 and Campbell, 1969), we will position ourselves to identify and enhance

those variables that meet the above five targets of any good voter reform initiative.

A solution involves exploration of different voting reform measures across Canada's geographically, politically, and economically diverse regions in an attempt to ascertain what system is best for Canadian's constituents. If we cannot pursue such well-controlled experimental manipulations, other investigatory tools are at our disposal. At this point it would be a mistake to get caught up in the details. Instead, let us concern ourselves with the value that political experimentation could bring to Canada. Undoubtedly such a rigorous approach would be an experiment in itself, and one that could alter how other nations approach their own reform and social policies. Furthermore, investigations into voting behavior makes clear the value added when using experimental assessments to guide decision making: it eliminates guesswork, is completely transparent, and completely removes blame from decisions and places onus on the facts. Therefore, public policy that is viewed as or based on a social experiment is always right. If the policy fails, replication and analysis bring about self-corrections and ultimately a workable system.

The execution of several concurrent, small-scale studies at the local-government level would bring about valuable information that would solve questions about electoral reform. For example, future research could evaluate the effect of various modes of prompting on voting behavior. Prompting has been found to be an effective tactic to change a host of significant behaviors demonstrated by citizens (see Luyben, 2009, for a review). As an example, Statistics Canada (2016) recently observed a very high response to the most recent census. While it is true that the Canadian census is legally mandatory and this could account for the response rate, counter-arguments would cite the systematic prompting procedures that will be shared with the public in February 2017. Another avenue for small-scale research would be to investigate the effect of incentive or reinforcement procedures on voter turnout. Incentives can take many

forms, such as a tax credit (Hicks, 2002). Reinforcement procedures have the benefit of producing long-term behavior change, and can be thinned over time (see Cooper, Heron, & Heward, 2007, for a review). Further, reinforcement procedures avoid the side-effects associated with punishment procedures. Consider that in some nations, compulsory voting works because of the intense threat of punishment for not voting (e.g., In Belgium, absent voters face steep fines and risk temporarily losing their right to vote [Belgium's Ministry of the Interior, n.d.]). The difference between a system that rewards the desired behavior and a system that punishes the undesired behavior is a difference between having citizens who want to vote and having citizens who have to vote. The former leads to feelings of fairness and justice, the latter to feelings of coercion and disdain.

In summary, our analyses and experience suggest that it may be too early for the Committee to consider any suggestion placed before it without proper careful experimental examination. We urge the Committee to view electoral reform as an opportunity to use scientific methods to inform public policy. The Committee must make a decision that produces the least amount of risk. We are of the opinion that joint ventures between governments and researchers will reveal better tactics that could increase voter turnout without the unwanted side-effects found in coercive or misunderstood systems. In turn, these tactics would enable the Committee to produce policies that best fulfills the 5 criteria for successful voter reform. This would be a significant step forward for Canada, democracy, and would be a model for the world. Thus, our expert opinion is for this Committee to motion for the adoption of pilot experimental analysis.

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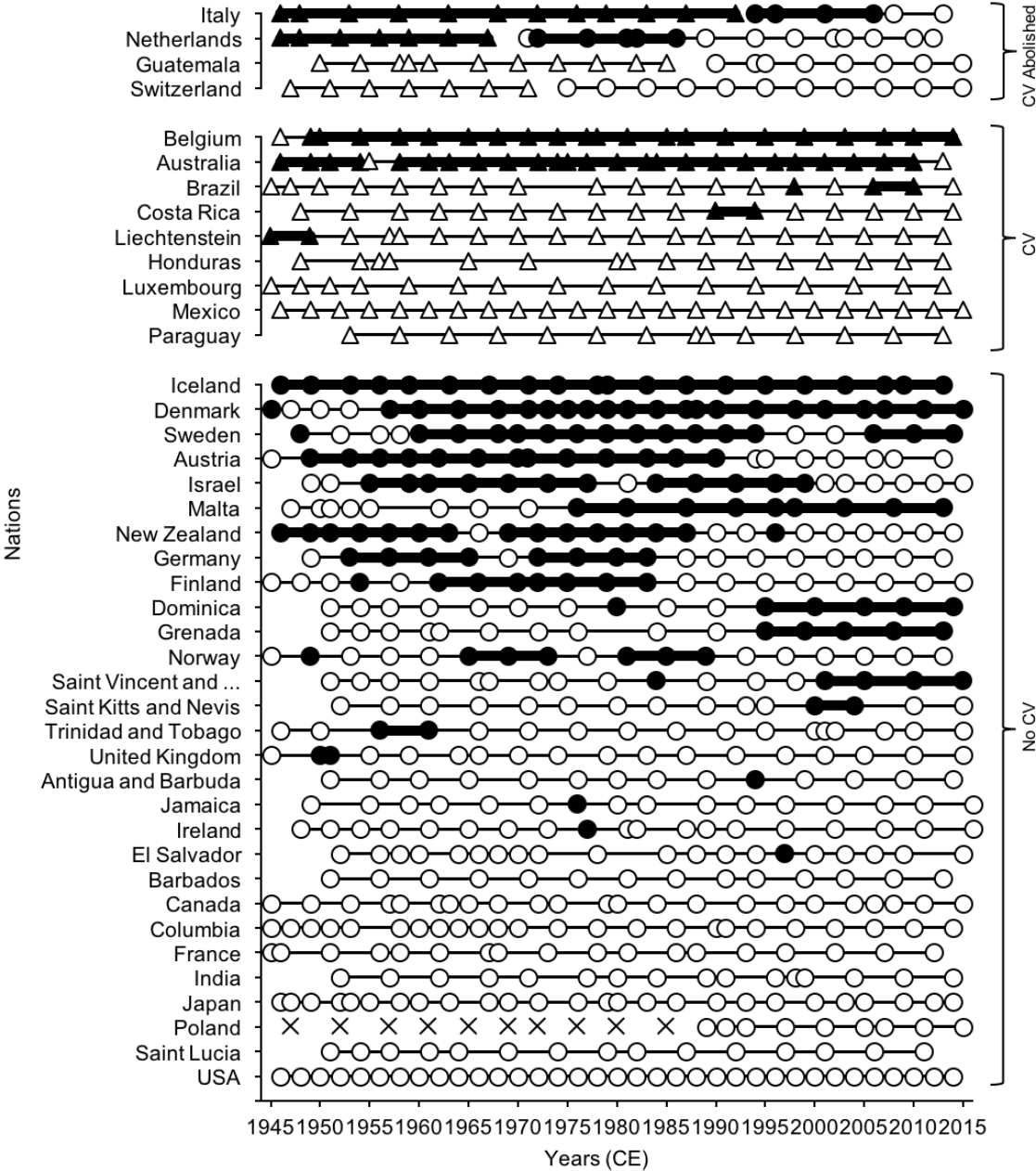
Figure 1. A condensed-line graph displaying the level of estimated eligible voter turnout in elections since 1945 for each included nation. Open circles represent elections held without compulsory voting (CV); open triangles represent elections held with CV; X's represent known elections with missing data; thin data paths indicate that the data path trended below 80%; thick data paths indicate that the data path trended entirely above 80%; braces along the secondary y-axis capture nations that used CV similarly. Nations were arranged according to their use of CV and in order according to percentage of total data paths above 80%. If tied, nations were listed alphabetically.
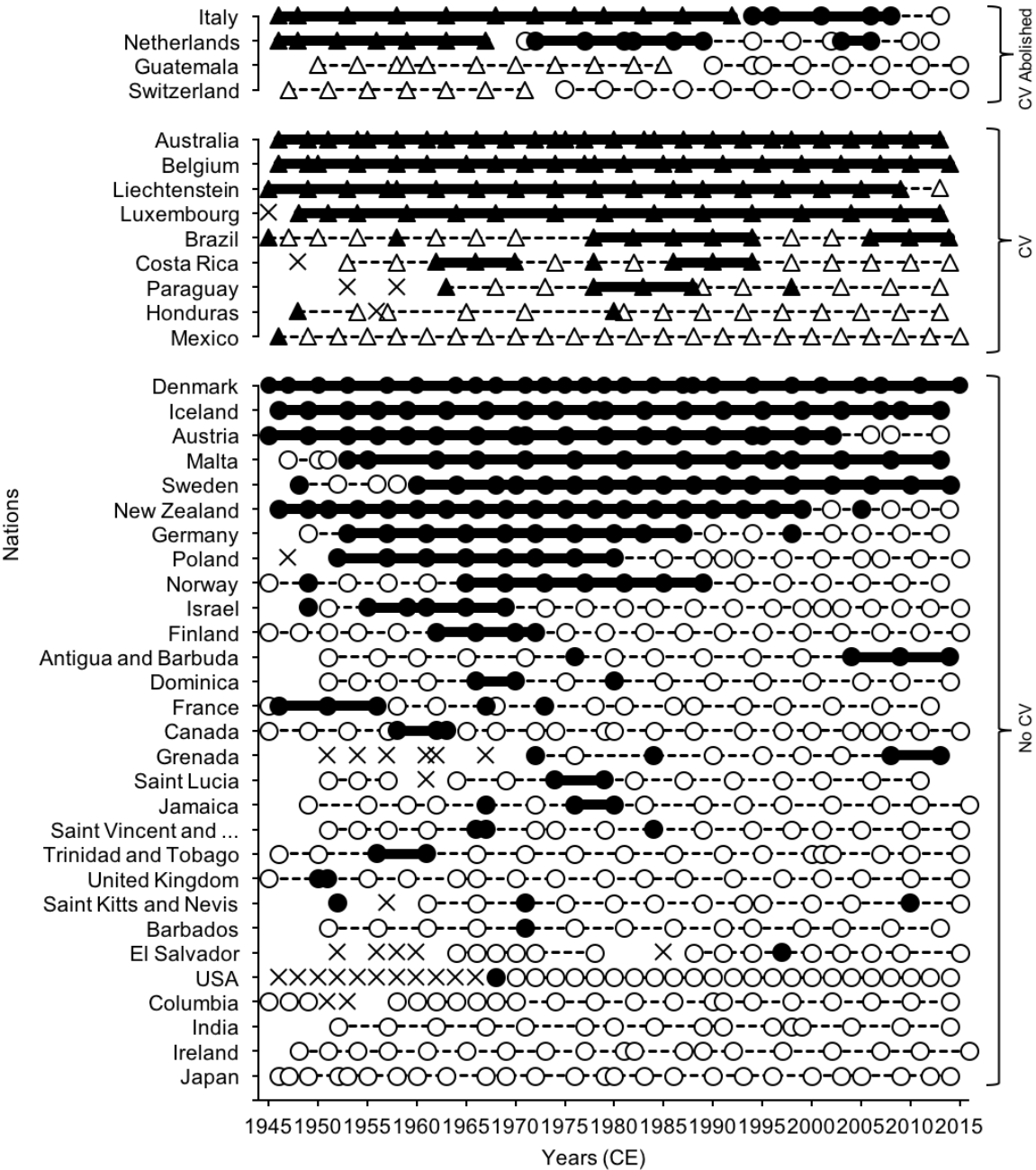
Figure 2. A condensed-line graph displaying the level of registered voter turnout in elections since 1945 for each included nation. Open circles represent elections held without compulsory voting (CV); open triangles represent elections held with CV; X's represent known elections with missing data; thin data paths indicate that the data path trended below 80%; thick data paths indicate that the data path trended entirely above 80%; braces along the secondary y-axis capture nations that used CV similarly. Nations were arranged according to their use of CV and in order according to percentage of total data paths above 80%. If tied, nations were listed alphabetically.