

A Punctuated Equilibrium Analysis of Canadian Gun Control Policy, 1989-2012

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Introduction

In 1959, Charles Lindblom observed that most policies most of the time follow a pattern of incrementalism; that is, they change very little from year-to-year and most policy changes can be characterized as modest adjustments to changing political or socio-economic circumstances (Lindblom 1959). Yet, many other scholars also noted that rapid, transformative policy changes also occur from time to time, and, when they do, a longstanding policy can be completely turned on its head. This evidence of incrementalism alongside occasional radical policy change created a difficult theoretical puzzle for policy scholars to unravel: how could policy development display both long-term stability (i.e., incrementalism) and periodic instability (i.e., periodic radical change) at the same time? This is the question that inspired the development of Punctuated Equilibrium Theory (PET), formulated by Frank Baumgartner and Bryan Jones in the early 1990s. PET has since become one of the most popular theories of the policy process with an impressive international data collection initiative, known as the Comparative Agendas Project, that continues to support new PET research. Although PET has gained less traction in Canada than in the US, we will investigate its potential here by undertaking a PET analysis of Canadian gun control policy.

Punctuated Equilibrium Theory

PET begins with the observation that, over the long-term, public policies follow a pattern of punctuated equilibrium in which policies remain relatively stable (or at equilibrium) for extended periods of time but periodically undergo radical change (or punctuation). The empirical evidence showing that policies follow a punctuated equilibrium pattern, both in the US and elsewhere, is extensive and overwhelming, so it is not surprising that a body of theory was developed to explain it. PET's effort to explain both the extended periods of policy stability and the brief periods of radical change make it different from other theories, such as the ACF and MSF, that focus mostly on explaining policy change. This also means that PET studies are inherently longitudinal in origin, sometimes covering periods of more than a hundred years, as they seek to identify patterns of punctuated equilibrium and account for both parts of the punctuated equilibrium cycle.

The PET conception of policy development is based on assumptions of bounded rationality and is fundamentally concerned with how governments receive, process, and respond to information. First, PET distinguishes between the macropolitical institutions at the centre of a political system (such as Parliament) and the policy subsystems at the peripheries of a political system (such as the firearms policy subsystem). While the macropolitical institutions are where the 'big' policy decisions are made, it is in the policy subsystems where actors specializing in various policy areas do the main day-to-day policy work of government, making incremental policy adjustments in response to new information. Because there are a multitude of policy subsystems and each of them is specialized in a different policy area, from a system-wide perspective, policy subsystems process information in a parallel fashion and allow governments to make simultaneous incremental policy adjustments to keep most policies at equilibrium most of the time. When demands for 'big' policy changes arise, these must be addressed by the macropolitical institutions at the centre of a political system, but the macropolitical institutions process information in a serial fashion, dealing with one issue at a time. Because the issue demands placed on the macropolitical institutions are always greater than its supply of attention, a bottleneck is created and only the most serious or pressing issues are typically addressed at any given time while others wait in the queue. This means that it is very difficult to capture the attention of the macropolitical institutions and to get an issue on the policy agenda, and this is the main challenge for those seeking a major policy change (Baumgartner, Jones and Mortensen 2018, 59-60).

According to PET theory, most policy issues are confined to policy subsystems for long periods of time because of the presence of policy monopolies. A policy monopoly involves "... a monopoly on political understandings concerning the policy of interest, and an institutional arrangement that reinforces that understanding" (Baumgartner and Jones 2009, 6) In a policy monopoly, some actors and their policy ideas become dominant and this dominance is reinforced by established institutions, such as administrative agencies and legislative committees, who service and protect the monopoly. The hallmark of a policy monopoly is the presence of negative feedback. In negative feedback, most actors are content with the existing policy and they send signals to maintain or adjust the status quo in modest increments, much as a thermostat receives signals to maintain or adjust room temperature at a constant level (Baumgartner, Jones and Mortensen 2018, 61). Policy monopolies generating negative feedback are the source of incrementalism and equilibrium. Policy issues are confined to the policy subsystem, conflicts are managed within the subsystem, and policies are modestly adjusted in small increments.

A policy monopoly can dominate a policy area for decades, but, in the long run, all policy monopolies are vulnerable to break-up through the onset of positive feedback. Positive feedback usually starts with small things, such as protests or incidents that illustrate the shortcomings of a policy monopoly, but these small things can trigger more dissent, which can trigger even more dissent, in a process that snowballs and becomes self-reinforcing. As positive feedback builds, the attacked policy monopoly becomes unable to contain conflict within the policy subsystem and the issue expands to the macropolitical institutions. This issue expansion is crucial because it is only in the macropolitical institutions where there is a real potential for major policy change.

The onset of positive feedback and issue expansion is somewhat unpredictable, but, when it happens, it can bring down an established policy monopoly, sometimes in relatively short order. In PET, two factors

are identified as particularly important in positive feedback and issue expansion: policy images and venue shopping.

A policy image is a shared notion of a policy's purpose and the values it serves. When there is one clear policy image that is shared by most actors in a policy subsystem, this helps to reinforce a policy monopoly. However, policy images can be contested and challenging an image can initiate positive feedback as one image challenge emboldens another challenge, and another, and so on. Policy images often become contested because new dimensions of an issue come to light and receive sudden emphasis. For example, Baumgartner and Jones show that, in the first half of the 20th century, pesticides had a positive policy image based on their contributions to increasing agricultural production and economic growth; but, in the late 1950s, a series of pesticide-related disasters shifted focus to the health and environmental dimensions of pesticide use, which triggered further attacks from environmentalists in the 1960s, and eventually shifted the policy image of pesticides from overwhelmingly positive to overwhelmingly negative (Baumgartner and Jones 2009, 95-99). Such policy image shifts are important because they help to break-up policy monopolies and expand issues from policy subsystems to macropolitical institutions.

The other important factor in this process is venue shopping. A policy venue is defined as any institution that has authority to make policy decisions concerning an issue (Baumgartner and Jones 2009, 31). Venue shopping occurs when the opponents of a policy monopoly shift an issue out of its traditional venues, that are typically dominated by the policy monopoly, and into new venues that are more receptive to dissent and reform. Baumgartner and Jones (2009) highlighted the importance of venue shopping with US institutions in mind, which tend to be quite open and jurisdictionally fluid, providing plenty of opportunities to move issues between venues. Canada's political institutions are not as open or fluid as in the US, but plenty of research has shown that Canadian institutions still provide opportunities for venue shopping (Pralle 2003) (Constanelos 2010) (Boucher 2013). Shifting issues into new venues can contribute to positive feedback and generate new opportunities for issue expansion, both of which can subvert and destroy an established policy monopoly.

Fundamentally, the PET explanation of policy stability and change is based on the tendency of governments to be disproportionate information processors. A proportionate information processor is one that receives information signals and, based on the seriousness or urgency of the signals, responds in kind. So, a proportionate information processor responds to minor problems with minor adjustments and major problems with major adjustments, in a timely and measured way. Governments, however, do not work like this, according to PET. Because of the presence of policy monopolies and the difficulties involved in breaking them down, governments tend to underreact to problems signals (when a monopoly is present) or overreact to problem signals (when a monopoly breaks down). This results in the lurching policy responses that characterize punctuated equilibrium, where governments offer little policy response for long periods of time, only to introduce sweeping change when they finally respond to problem signals (Jones and Baumgartner 2005, 20-21).

Jones and Baumgartner (2005) have pushed this logic even further in their "general punctuation hypothesis." They have shown that disproportionate information processing is endemic to many

governance situations, not just policy-making. They also show that different institutional designs possess varying levels of “institutional friction” that can moderate or amplify disproportionate information processing. Institutions with low friction impose fewer decision costs, make it easier to act, and thereby moderate disproportionality. In these low friction institutions, equilibria tend to be shorter and punctuations less pronounced. In contrast, institutions with high friction impose higher decision costs, make it more difficult to act, and thereby amplify disproportionality. In high friction institutions, equilibria tend to be longer, and punctuations tend to be more pronounced. So, in the general punctuation hypothesis, a connection is drawn between institutions and punctuated equilibrium outcomes, adding an element not formally included in the original PET formulation.

Unlike most theories of the policy process, PET does not have a recognized policy change hypothesis that makes point predictions about when policy changes will (or will not) occur. The point at which positive feedback results in policy punctuation, PET scholars argue, is inherently unpredictable, so attempting to hypothesize when policy punctuations occur is a futile exercise. Instead, PET is intended to explain patterns of policy stability and change over the long-term, preferably using quantitative data, even if specific instances of policy change can not be predicted (Baumgartner 2006, 25). This has not precluded PET scholars from advancing an elaborate qualitative explanation of the processes underlying policy stability and change, as described above. The PET qualitative explanation is grounded in extensive empirical work, and it is this explanation that will be further investigated here in the case of Canadian firearms policy.

PET is a popular theory in the US, has developed a strong following in western Europe, and has a growing number of applications in Canada. Canada is included in some large ‘n’ cross-national PET studies such as Martin and Streams’ (2015) analysis of global health expenditures in 17 countries, and Jones, et al’s (2009) study of budgets across 12 different governance systems. These studies found that Canadian policy outcomes fit the general pattern of punctuated equilibrium, though they have little to say about Canada specifically. PET was also an important influence in Soroka and Wlezien’s (2010) award-winning work on the linkages between public opinion and policy outcomes in Canada, the UK, and the US. Their ‘thermostatic model’ posits the presence of negative feedback in policy-making, and they marshal a wealth of empirical evidence in support of this model (Soroka and Wlezien 2010, 29).

There are also PET studies of entirely Canadian cases, though there are not many of them and most utilize some aspect of PET rather than applying the theory, as a whole. Howlett (1997) conducted one of the pioneering Canadian PET studies in his analysis of nuclear energy and acid rain policies from 1977 to 1992, but his focus was agenda-setting, not policy-making.¹ Other studies make use of PET concepts to construct narratives explaining policy change, but they are not fulsome applications of the theory. Included in this group is Pralle’s (2003) study of BC forestry policy, Eidelman’s (2010) analysis of Ontario land use policy, Hoberg and Phillips’ (2011) study of Alberta oil sands policy, and Ritchie and Jackson’s (2014) article on Canadian and international sport policy. Collectively, these studies illustrate the applicability of PET concepts for understanding Canadian policy development, but they do not provide a

¹ There is some debate about the theoretical interpretations and research methods used by Howlett in this study as evidenced by Soroka’s (1999) critique and Howlett’s (1999) rejoinder in the *Canadian Journal of Political Science*.

clear indication of how well PET, as a whole, explains Canadian policy-making. In this chapter, we take a small step toward filling this void this by testing PET in Canadian firearms policy.

Our investigation of PET is a two-step process. First, we investigate Canadian firearms policy to determine whether it has followed the punctuated equilibrium pattern of stability and change. We do so using quantitative data on the number of firearms registered in Canada over the last four decades and find that there is strong evidence of punctuated equilibrium in this policy area. Second, we investigate the PET qualitative explanation of punctuated equilibrium using congruence methods. Although the PET qualitative explanation has several moving parts, it is formulated as a single proposition rather than multiple interlinked hypotheses that can be tested separately. This lends itself to what Beach and Pedersen (2016, 286) call singular congruence testing in which “...a single, theoretically unique but not certain proposition about the evidence...” is investigated in order to test a theory. The PET qualitative explanation is investigated twice, in two cycles of policy equilibrium and punctuation, one characterized by the *Firearms Act* punctuation and the other by the *Ending the Long-Gun Registry Act* punctuation. Singular congruence tests of this sort are confirming for a theory, if evidence is found in support of the proposition, but are not disconfirming for a theory if evidence is not found (Beach and Pedersen 2016, 286).

Policy Equilibria and Policy Punctuations

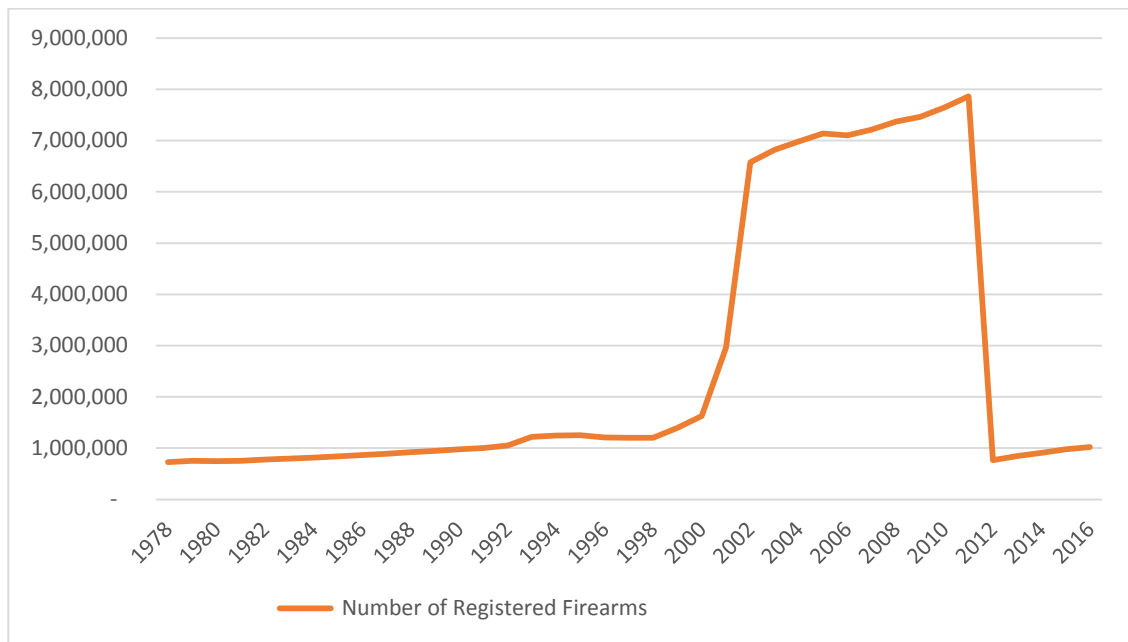
Any PET application is based on the premise that, over the long-term, the policy being studied follows a punctuated equilibrium pattern; that is, the policy is characterized by long periods of equilibrium interrupted by brief, occasional punctuations that move it from one equilibrium to another. This means that the first step in any PET analysis is to investigate whether the policy is characterized by punctuated equilibrium. To do so, PET analysts rely on quantitative policy indicators using data collected over a long period of time, usually several decades, and that is what we undertake for Canadian firearms policy in this section.

Most PET studies, including Baumgartner and Jones’ (2009) seminal work, rely on program spending as their preferred policy indicator, tracking spending over time to identify periods of stasis and change. However, in the case of Canadian gun control policy, relying on program spending data is problematic because these figures became so highly politicized in the early 2000s that it is difficult to find reliable, objective figures for the Canadian Firearms Program. The most credible figures come from the Auditor-General’s reports, but these do not provide year-by-year spending breakdowns, so they are of limited use for our purposes. Instead, a more reliable quantitative indicator is the number of registered firearms in Canada each year. This number demonstrates the extent of the federal government’s reach in firearms regulation and, since Ottawa has been registering some types of firearms for decades, it allows for longitudinal tracking of Canadian firearms policy. To that end, Figure 1 charts the number of registered firearms in Canada from 1978 to 2016, based on figures recorded in the Restricted Weapons

Registration System from 1978 to 2002 and the Canadian Firearms Registration System from 1999 to 2016.²

An examination of Figure 1 readily shows that, based on firearm registrations, Canadian gun control policy has followed the punctuated equilibrium pattern. More specifically, Figure 1 suggests that, in our period of study, there have been three periods of policy equilibrium interrupted by two policy punctuations: an equilibrium prior to 2000, a policy punctuation in 2001-02, a second equilibrium from 2002 to 2011, a second punctuation in 2012, and a third equilibrium since 2012. Even more importantly, the pattern of equilibria and punctuations in Figure 1 matches well with the legislative history of gun control during this period.

Figure 1 – Registered Firearms in Canada, 1978-2016 (Hung 2006) (Commissioner of Firearms 2003-16)



The first period of equilibrium was prior to 2000 and was shaped by legislation from 1969 that required the registration of all firearms classified as prohibited and restricted. Figure 1 shows modest and incremental growth in firearm registrations during this period, from around 750,000 in the late 1970s to about 1.2 million in the late 1990s, most likely due to demographic factors such as population growth. However, no dramatic increases or decreases in registrations took place, not even after Bill C-17's

² Prior to the 1995 *Firearms Act*, all firearms classified as prohibited and restricted were required to be registered and they were registered in the Restricted Weapons Registration System (RWRS). The *Firearms Act* introduced universal firearms registration and a new registration system, the Canadian Firearms Registration System (CFRS), was created to accommodate this in 1999. All firearms registered in the old RWRS had to be re-registered in the new CFRS by January 1, 2003. From 1999 to 2002, the RWRS and CFRS existed in concert, and the figures for these years are the total number of firearms registered in both systems.

passage in 1991, suggesting that Bill C-17 was a modest, incremental policy change, despite the high political drama surrounding it – and its failed predecessor Bill C-80 – at the time they were debated.

The first period of equilibrium was interrupted by the policy punctuation of the *Firearms Act* in 1995, though the effects of the *Firearms Act* were delayed, and do not become evident in Figure 1, until 2001-02. The *Firearms Act* required the registration of all firearms in Canada, extending the registration requirement from prohibited and restricted weapons to unrestricted ones, as well. After several delays, the deadline for registering all firearms was set at January 1, 2003, resulting in a massive spike in registrations in 2001 and especially 2002 as firearms owners rushed to meet the deadline. By 2003, almost 7 million firearms were registered in Canada, which was a direct result of the *Firearms Act*, even though it had been passed eight years earlier.

With the introduction of universal firearms registration, Canadian gun control policy settled into a new equilibrium that lasted until 2012. During this period, registrations grew steadily from just under 7 million to just under 8 million, as stragglers and resisters came to terms with the new policy regime and gradually registered their weapons, and as demographic factors continued to increase the total number of firearms owned in Canada. The most notable feature of this period of equilibrium is its brevity. Policy equilibria are typically quite stable and enduring, with most lasting several decades, but this one was relatively short, lasting about 17 years (if we count from 1995). Policy equilibria of this brief duration are not unheard of, but they are atypical.

Universal firearms registration came to an abrupt end in 2012 as a result of a second policy punctuation, the *Ending the Long-Gun Registry Act*. This legislation returned registration requirements to a pre-*Firearms Act* state, so that prohibited and restricted firearms had to be registered but unrestricted firearms did not. The effects of the *Ending the Long-Gun Registry Act* were immediate, because it was dismantling rather than creating a government program, so that the number of registrations plummeted from just under 8 million in 2011 to only 767,757 in 2012. This is the largest year-on-year punctuation shown in Figure 1. Since then, the limited evidence available suggests that we have entered another period of policy equilibrium with registrations growing slowly between 2012 and 2016.

The finding of punctuated equilibrium in Canadian firearms policy is consistent with the PET literature, which has found that all public policies follow the punctuated equilibrium pattern when studied over the long-term. Jones et al. (2009) even go so far as to suggest that, in public budgets, punctuated equilibrium should be considered “... a general empirical law”. PET proponents argue that punctuated equilibrium is universal “... because it is rooted in the capacities of government to process information and allocate attention” (Baumgartner, Jones and Mortensen 2018, 77-8). Institutional differences across political systems can affect the duration of equilibria and the intensity of punctuations, but the punctuated equilibrium pattern itself is universal (Jones and Baumgartner 2005). The presence of punctuated equilibrium in Canadian firearms policy is also important for our purposes because it allows for a test of the PET qualitative explanation of policy equilibria and punctuations using our selected case.

Explaining Policy Equilibria and Policy Punctuations

As outlined above, PET has an elaborate qualitative explanation of policy equilibria and punctuations. Periods of equilibrium are the result of policy monopolies characterized by policy image and institutional stability, producing negative feedback that keeps issues mostly contained within policy subsystems where only incremental policy changes can be made. Policy punctuations occur when policy image shifts and venue shopping breakdown policy monopolies, producing positive feedback and expanding a policy issue into the macropolitical institutions where major policy change can occur. Accordingly, these factors were the focus of our data collection and analysis.

Positive feedback and the firearms policy image were operationalized using Baumgartner and Jones' (2009) content analysis methodology. All articles relating to firearms, firearms use, firearms regulation, and the firearms industry were collected from the *Globe & Mail* between 1985 and 2015. The overall coverage of firearms issues was used as an indicator of positive feedback, as increasing media coverage usually reflects a building momentum for policy change. This media coverage data was then corroborated with political events to ensure their consistency. A content analysis of the *Globe & Mail* articles was also undertaken in an effort operationalize the firearms policy image. The content analysis coded each article on three dimensions: 1) the type of firearms-related activity being reported (whether it was an economic activity, a public health and safety activity, a government action, or a court action); 2) the tone of the article (whether it was positive or negative to the firearms industry or firearms users); and, 3) the location of the activity being reported (whether it was inside or outside of Canada). A full description of the coding frame and coding procedure is included in the appendix at the end of this chapter. The types of firearms activities being reported and the tone of this coverage were used as indicators of the firearms policy image, the data for which are summarized in Figures 2 and 3.

Some of the content analysis data were also used to identify instances of venue shopping and issue expansion. All of the articles coded as involving government actions or court actions were further examined to identify the policy venues in which these actions took place. These instances were then placed in historical context to determine whether they contributed to positive feedback in one of the two policy punctuations. If they did, they were identified as instances of venue shopping.³ The government actions data also served as a proxy for issue expansion: a dearth of reported government actions indicates that an issue is confined to a low-profile policy subsystem, while an abundance of reported government actions indicates that an issue has expanded to the high-profile macropolitical institutions. These reported government actions (or lack thereof) were then corroborated with historical evidence of parliamentary activity, such as the tabling of firearms bills, and administrative activity, such as policy implementations or evaluations, to determine whether the locus of firearms-related activities was Parliament or the firearms policy subsystem, at any given time.

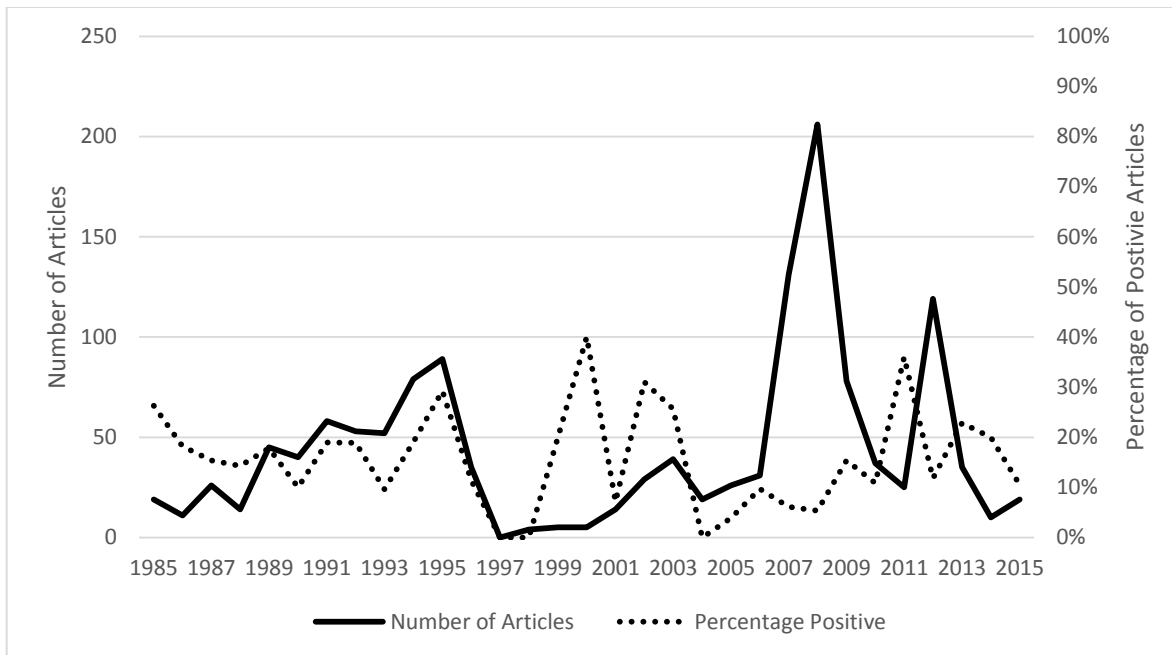
³ This approach is different than the one used in Baumgartner and Jones' work. They typically rely on Congressional committee activities as a proxy for venue shopping, an approach that is appropriate for the American political system which is quite open and jurisdictionally fluid. In Canada, where federal jurisdiction over criminal law is clear and the government tends to dominate Parliament, the political system is not as open and fluid and a different approach is needed. Our approach is appropriate, we argue, because it captures a wide range of policy venues, both inside and outside of Parliament, though it is certainly possible to conceive of other approaches that might also work.

Given that there were two cycles of equilibrium and punctuation evident in the firearms registration data, the PET explanation was investigated twice, once in the development of the *Firearms Act* (1995) and once in the development of the *Ending the Long-Gun Registry Act* (2012). The results of these investigations are outlined below.

As explained above, the first firearms policy equilibrium took place prior to the passage of the *Firearms Act* in 1995. Figure 2 provides media coverage data for 1985 to 1995, and these data suggest that 1985-88 was a period of policy equilibrium. During this period, the negative tone of media coverage indicates that the image of firearms was poor. However, there was little overall coverage of firearms issues and the coverage of firearms issues was not increasing, suggesting that firearms were not highly salient and not generating positive feedback. There is also no evidence of venue shopping or issue expansion. Very few government actions related to firearms were reported in 1985 and 1986 and no government actions were reported at all in 1987 and 1988.⁴ Nor was any new gun control legislation debated by Parliament during this time. As Brown (2012, 199) observes, “[t]he polarizing debates over firearm regulation in the 1970s dissuaded all major political parties from pursuing gun controls during the 1980s”. Thus, all of the evidence suggests that firearms issues were confined to the firearms policy subsystem and kept at equilibrium during the 1985-88 period.

Figure 2 – Firearms-Related Coverage in the Globe & Mail, 1985-2015

⁴ The government actions for 1987 and 1988 reported in Figure 3 were actions by American governments reported in the Globe & Mail.



After 1988, the situation changed and a period of positive feedback emerged in the lead-up to the *Firearms Act*. Figure 2 shows an upward trend in the coverage of firearms issues between 1989 and 1995, indicating that firearms became increasingly salient during this period. This mounting attention to firearms issues is further supported by historical events. The start of the period is marked by the Montreal Massacre of December 1989, and this tragedy had a number of effects that ‘snowballed’ the pursuit of gun control reforms. Most notably, the Massacre sparked the formation of the organized gun control movement in Canada which, over the next several years, would recruit thousands of supporters and would pursue new gun control measures in a variety of policy venues. This is a classic example of positive feedback, and this positive feedback was an important precursor to the eventual *Firearms Act*.

It is also clear that venue shopping was part of this positive feedback process. More government actions were reported in every year of the 1989-95 period than in any year of the 1985-88 period. Although the vast majority of these reported actions were in the federal (parliamentary) venue, some actions were also reported in provincial and municipal venues. Of these, the best examples of venue shopping were at the municipal level, where gun control advocates advanced their cause in city councils: in 1991-92, the Coalition for Gun Control persuaded 11 city councils across Canada to pass resolutions calling for stricter gun control (Mayors Call for Tougher Gun Control Laws 1992); and, in 1994-95, the Coalition again got endorsements from Canada’s big city councils in support of universal firearms registration (Cernetig 1994). Venue shopping such as this helped to build momentum for gun control reforms in the 1989-95 period, thereby contributing to positive feedback. There is little evidence of similar venue shopping at the provincial level, as most provincial governments who spoke out on gun control took stances against it, protecting rather than attacking the policy status quo (Romanow Threatens Gun Control Challenge 1995).

As positive feedback builds, PET expects that policy issues will expand from a policy subsystem to the macropolitical institutions, and firearms policy in the early 1990s appears to have followed this pattern.

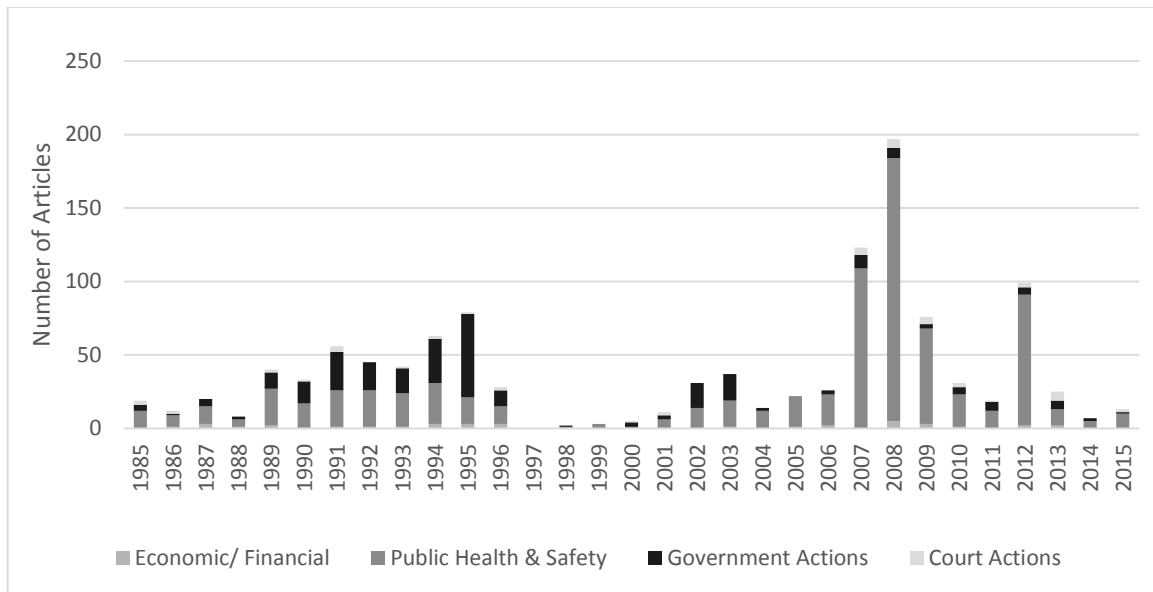
This is evidenced by the spate of firearms legislation considered by Parliament during this time, including Bill C-80 (1990), Bill C-17 (1991), and the *Firearms Act* (1995). Once firearms issues made it onto the parliamentary agenda, major policy reforms could be considered by policy decision-makers, creating the potential for a policy punctuation.

When policy punctuations occur, PET assumes that the design of the new policy will be commensurate with the policy image prevailing at that time. Figure 2 shows that the firearms policy image in the late 1980s and early 1990s was poor: in most years, over 80% of firearms coverage was negative in tone. This was true not only of the 1989-95 period, but of the 1985-88 period, as well. Since policy image shifts are typically long-term processes spanning several decades, it may be that firearms had a positive image in the more distant past, but the data to 1985 suggest that the image of firearms was poor for most of our period of study. Given the poor firearms policy image at the time, PET would expect that any policy punctuation would be negative for firearms owners. This was indeed the case with the *Firearms Act* which imposed universal registration of firearms on reluctant, and sometimes hostile, firearms owners.

In sum, all aspects of the PET explanation of policy punctuations are evident in the *Firearms Act* case. The pattern evidence in Figure 2 and events in the aftermath of the Montreal Massacre both point to a positive feedback process related to gun control in the 1989-95 period. Venue shopping was part of this process and it is clear that the gun control issue expanded onto the parliamentary agenda in the early 1990s. When the policy punctuation occurred, the new policy was consistent with the prevailing policy image, both of which were unfavourable to firearms owners. Thus, in all respects, the PET explanation is empirically supported.

After the *Firearms Act* punctuation, Canadian firearms policy settled into a new equilibrium based on universal firearms registration. When a new policy equilibrium is reached, PET expects that negative feedback will resume and policy disputes will be mostly contained within the bounds of a policy subsystem. The data in Figure 2 for the 1996-2000 period are consistent with this expectation. Coverage of firearms issues dropped off significantly in the wake of the *Firearms Act* indicating that firearms had declined in salience and firearms policy was mostly out of the public eye. Moreover, Figure 3 shows that few government actions were reported during this period, mostly because no new gun control legislation was proposed during this time. Instead, firearms stakeholders were preoccupied with the implementation of the new gun registry, a process orchestrated by government administrators with input from various gun control and gun rights stakeholders on the Canadian Firearms Advisory Committee. The work of the Committee was mostly low-profile and technical, which is characteristic of issues confined to a policy subsystem (Pal 2003, 252). Thus, the 1996-2000 period shows all of the expected hallmarks of a policy equilibrium.

Figure 3 – Firearms-Related Activities in the Globe & Mail, 1985-2015



This new equilibrium ended with the *Ending the Long-Gun Registry Act* of 2012, but there is scant evidence of positive feedback in the lead-up to this policy punctuation. In the 2000-03 period, Figure 2 shows that media coverage of firearms increased and Figure 3 shows that much of this coverage was focused on government actions. This was the period in which the scandalous implementation of the Canadian Firearms Program came to light, and there is evidence of positive feedback building during this time. This positive feedback pertained to the costs of the gun registry and momentum was building for a reform or repeal of the program. However, by 2004, this momentum seems to have petered out, and evidence of positive feedback disappears. Coverage of firearms skyrocketed to unprecedented levels in 2007-09, but most of this coverage focused on public health and safety issues, such as gun violence and gun crime, rather than government actions. So, although firearms were highly salient, there was no building of positive feedback from the 2000-03 period through the 2007-09 period that could have driven an anti-gun control policy punctuation.

During the brief build-up of positive feedback in the 2000-03 period, venue shopping was a very important factor. Problems with the implementation of the Canadian Firearms Program started coming to light as early as 1999. Around this time, gun registry opponents began attacking the government on the registry's problems and, in early 2001, convinced the federal Auditor-General to do a full investigation. This was an important instance of venue shopping because it moved the gun registry issue into a venue that the government could not control or suppress, and it was a venue primarily focused on public spending and accountability, two areas where the registry was vulnerable. The Auditor-General's scathing report in 2002 struck a serious blow to the integrity and popularity of the gun registry and was probably the single-most important event in building the positive feedback described above, even though this positive feedback was not long-lasting. Other venue shopping efforts were also undertaken to attack the gun registry, such as an unsuccessful effort to challenge the constitutionality of the

Firearms Act in the courts, but these efforts did not contribute to positive feedback in the same way the Auditor-General's report did.

As positive feedback built in the early 2000s, there is clear evidence of issue expansion from the firearms policy subsystem to the macropolitical institutions. When the gun registry's implementation problems came to light, and as calls for government action grew from the opposition parties, the Auditor-General, and even a large segment of the public, the design and operation of the gun registry became a parliamentary issue. The registry became a frequent topic during Question Period in the early 2000s and successive Liberal governments introduced a series of policy measures between 2003 and 2005 to contain the cost and increase the efficiency of the registry. This sort of issue expansion is expected with the onset of positive feedback, as occurred in the 2000-03 period. However, what is not expected is the persistence of the issue on the macropolitical agenda well after the positive feedback has dissipated. The gun registry stayed on the parliamentary agenda through the minority Conservative governments of 2006-08 and 2008-11, as they made four unsuccessful attempts to repeal the long-gun registry, and it continued on the parliamentary agenda until the successful repeal by the majority Conservative government in 2012. Thus, positive feedback initiated issue expansion, but issue expansion continued almost a decade after positive feedback had dissipated, an anomalous result suggesting that issue expansion was not driven entirely by positive feedback and that other factors were at work here.

An even more anomalous result is the design of the *Ending the Long-Gun Registry Act* itself, which is contrary to PET expectations. Figure 2 shows that the tone of firearms coverage improved between 1999 and 2003, the period in which the gun registry scandal became public. However, this improved policy image was not sustained beyond 2003. After 2003, the tone of firearms coverage became predominantly negative once again, focusing mostly on the health and safety aspects of firearms rather than their economic, social, or cultural contributions. This negative tone continued, with some fluctuation, through 2012 when the *Ending the Long-Gun Registry Act* was adopted. This means that there was a mismatch between the prevailing firearms policy image and the policy punctuation in 2012: the policy image was negative for firearms owners, but the policy punctuation was positive for firearms owners. This outcome is exactly contrary to PET expectations.

Overall, the PET explanation of policy punctuations is only partially supported in the *Ending the Long-Gun Registry Act* case. Media coverage and political events indicate a period of positive feedback in the 2000-03 period, and there is no question that venue shopping was an important contributor to this process. It is also clear that this positive feedback stimulated issue expansion, making the gun registry a political issue and putting it on the parliamentary agenda. Yet, positive feedback for gun registry reform dissipated after 2003 as attention shifted to gun violence and gun crime for the next several years. Despite the absence of positive feedback, the gun registry remained on the parliamentary agenda for another decade and, when the policy punctuation came in 2012, the punctuation did not match the prevailing policy image. Thus, the PET explanation is supported by the evidence until the mid 2000s but, after that, Canadian firearms policy performed contrary to PET expectations.

Discussion

Based on our investigation of Canadian firearms policy, much of PET is supported as theory of Canadian policy-making.

The fundamental premise of PET, that policies experience long periods of equilibrium interrupted by occasional punctuations, is evident in our case. The data on firearm registrations summarized in Figure 1 clearly shows a first period of equilibrium punctuated by the 1995 *Firearms Act*, followed by a second period of equilibrium punctuated by the 2012 *Ending the Long-Gun Registry Act*. This adds to the mountain of evidence already amassed by PET scholars demonstrating the pervasiveness of the punctuated equilibrium pattern in a range of policy areas across a variety of polities. The only caveat is the unusually short duration of the second equilibrium period in Canadian firearms policy, which lasted only 17 years as opposed to the decades' long equilibria more commonly found in PET studies.

Recent PET work on “institutional friction” may be instructive here. As noted above, institutional friction is the idea that some institutions offer less resistance to policy punctuations because they put up fewer barriers to major policy change. Centralized institutions with few veto points – as existed in the Canadian firearms case – offer less institutional friction than decentralized institutions with many veto points. This is potentially relevant here because, if Canadian institutions offered little institutional friction, this may have facilitated efforts to scrap the long-gun registry, ending this policy equilibrium in relatively short order. Thus, low institutional friction may help to explain why the policy equilibrium based on universal firearms registration lasted only 17 years, but further research is needed to conclude this with certainty.

Although PET does not put forward a hypothesis that allows for point predictions of major policy change, it does advance an elaborate qualitative explanation of the processes underlying periods of equilibrium and the punctuations that interrupt them. These processes were empirically investigated in the lead-up to both the *Firearms Act* and the *Ending the Long-Gun Registry Act*.

The periods 1985-88 and 1996-2000 showed clear evidence in support of the PET explanation of policy equilibria. Both 1985-88 and 1996-2000 were identified as periods of equilibrium by the data in Figure 1. Moreover, the media coverage data in Figure 2 and political events during each period were consistent with PET expectations of the politics underlying policy equilibria: there was no positive feedback, there was no issue expansion, and firearms issues were confined to the firearms policy subsystem. Because of this, firearms issues did not capture the attention of policy-makers in Parliament and no major policy change were made. Thus, PET offers an empirically supported explanation of the firearms policy equilibria we investigated.

The evidence with respect to the PET explanation of policy punctuations is not as straightforward: the theory is supported in the *Firearms Act* but is only partially supported in the *Ending the Long-Gun Registry Act*. In the wake of the Montreal Massacre, media coverage and political events show clear evidence of positive feedback, and venue shopping was part of this growing momentum for firearms policy change. There is also clear evidence of issue expansion and, when the policy punctuation occurred

in 1995, the design of the new policy was consistent with the prevailing firearms policy image. This was not the case with the *Ending the Long-Gun Registry Act*. Although there was evidence of venue shopping, positive feedback, and issue expansion in this case, the momentum for policy change generated by these factors seems to have died out around 2003-04, well before the policy punctuation in 2012. This is inconsistent with PET expectations that policy change momentum should continue to build – and become overwhelming – up to the point of policy punctuation. Also inconsistent with PET expectations was the design of the *Ending the Long-Gun Registry Act* which was contrary to the prevailing firearms policy image. So, PET provides a fulsome account of the *Firearms Act* punctuation, but provides only a partial account of the *Ending the Long-Gun Registry Act* punctuation.

Apart from its shortcomings in explaining the *Ending the Long-Gun Registry Act*, PET does well, overall, in explaining Canadian firearms policy, and the theory captures a dimension of policy-making that is distinctive from other theories. This is the notion that policy issues persist in policy subsystems during periods of equilibrium and, with the onset of positive feedback, expand into the macropolitical institutions, enabling policy punctuations. No other policy process theory describes or theorizes this movement of policy issues as PET does, yet this issue movement seems to be a fundamental and ubiquitous aspect of policy development. PET also offers a good understanding of the political forces underlying the movement (and non-movement) of policy issues, though the evidence in this chapter suggests that this understanding is imperfect, and more work could be done in this area. On balance, this makes PET a viable theory of Canadian policy-making, one deserving of more Canadian applications than it has received, thus far.

[Appendix: Content Analysis Methodology for Measuring the Firearms Policy Image](#)

In the PET explanation of punctuated equilibrium, one of the central explanatory factors is the policy image. A policy image is a shared notion of a policy's purpose and the values it serves. Policy images are important because a substantial shift in a policy image is identified as one of the precursors to a policy punctuation. Moreover, when a policy punctuation occurs, the policy introduced should be concomitant with the prevailing policy image. Therefore, obtaining a valid and reliable measure of a policy image is crucial to investigating the PET explanation of punctuated equilibrium.

In their seminal book, Baumgartner and Jones measured policy images by undertaking content analyses of media articles, and the approach used here followed their methodology as closely as possible. The overall strategy is to analyze media coverage of a policy area in order to determine whether coverage of the industry – in our case, the firearms industry – was positive or negative to the industry and whether this changes over time. In doing so, Baumgartner and Jones assumed that most policy areas are multi-dimensional and the media can choose to cover some dimensions and ignore others. Some of these dimensions are positive to the industry while others are negative. For example, in firearms policy, the media may choose to cover positive stories, such as growth in gun manufacturing or the popularity of firearms-based recreation, or they may choose to cover negative stories, such as gun violence and crime. The purpose of the content analysis was to generate data on such media coverage as a way of tracking the Canadian firearms policy image over time.

Baumgartner and Jones took samples of media articles from both periodicals and newspapers, but only the latter proved viable in our case. Baumgartner and Jones used the Reader's Guide to Periodical Literature in order to construct samples of US periodical articles, so we attempted to use the closest Canadian equivalent, the Canadian Periodical Index Quarterly (CPI.Q). Unfortunately, CPI.Q's coverage of Canadian periodicals prior to the mid 1990s is thin, so a viable sample of Canadian periodical articles could not be constructed. For their samples of newspaper articles, Baumgartner and Jones used the *New York Times*. As the closest Canadian equivalent, we selected the *Globe & Mail* for several reasons: 1) it is an indisputably national newspaper; 2) it was published throughout our entire period of analysis (unlike the *National Post*); and, 3) it has a centre-right editorial orientation.

Using CPI.Q, a sample of firearms-related articles was taken from the *Globe & Mail* spanning from 1985 to 2015. Following Baumgartner and Jones' lead, the sample was constructed using subject searches rather than keyword searches. Altogether, the following CPI.Q subjects were included in the sample: firearms, firearms industry and trade, firearms owners, firearms ownership, gun control, gun violence, and gun laws. These subjects were selected in an effort to ensure comprehensive coverage of the firearms industry. The timespan of 1985 to 2015 was selected in order to generate policy image data for the entire period of analysis in this book (1989-2012) and slightly beyond. When the subject terms were applied to the 1985-2015 period, a total sample of 1,419 articles was identified for the content analysis.

The content analysis was designed so that each article title served as a coding unit. This means that, in most cases, it was the article titles that were read and coded by the coders. In cases where article titles were vague or unclear, coders could resort to the context unit, which was defined as the article body. The context unit (i.e., the article body) provided suitable context to enable the coders to make decisions about the coding unit (i.e., the article title).

Article titles were coded using a three-level coding frame, two levels of which were based closely on those used by Baumgartner and Jones.

The first level of the coding frame coded for activity type, which asked the coders to identify the type of firearms-related activity being reported in the article. Coders were asked to select from among six coding options at this level: 1) economic and financial activities (such as firearms manufacturing, sales, and importing/exporting, or firearms-based livelihoods); 2) public health and safety activities (such as firearms crime, violence, or accidents as well as firearms use for personal protection or recreation); 3) government actions (to regulate or control the manufacture, trade, distribution or use of firearms); 4) court actions (related to firearms regulation or use); 5) other types of firearms-related activities; and, 6) unable to determine the type of activity. These categories were based on those used by Baumgartner and Jones.

The second level of the coding frame coded for article tone, as the coders were asked to determine whether the article was positive or negative to the firearms industry. In coding for tone, there were three coding options: 1) positive for the firearms industry (good things for the industry cast in a positive or neutral light and bad things for the industry cast in a negative light); 2) negative for the firearms industry (bad things for the industry cast in a positive or neutral light and good things for the industry

cast in a negative light); and, 3) unable to determine the tone for the firearms industry. Again, these codes were based on those used by Baumgartner and Jones. The coding guide included numerous examples of activities with positive and negative tones in order to guide the coders' coding decisions.

Finally, the third level of the coding frame coded for the location of the reported activity, something not contemplated by Baumgartner and Jones. This was added due to the coverage that American firearms issues receives in Canada. It was useful to know whether the policy image data being generated by our *Globe & Mail* analysis was based on coverage of Canadian firearms-related activities, foreign firearms-related activities, or some combination of the two. Baumgartner and Jones did not have to contemplate this in their analysis because US media are not affected by foreign influences in the same way that Canadian media are. Coding for activity location involved four options: 1) activities inside Canada; 2) activities outside Canada; 3) activities both inside and outside Canada (such as firearms smuggling or importing/exporting); and, 4) unable to determine activity location.

The coding process itself involved two coders working independently from the same coding guide. The coding guide outlined the coding frame in detail and two rounds of practice coding were undertaken to familiarize the coders with the coding frame. Each round of practice coding involved 50 different articles from the sample. During final coding, all coding decisions were recorded in Microsoft Excel spreadsheets, one for each coder.

The use of independent coders was important because it enhanced the reliability of the resulting data. The percentage of agreement between the coders was 94.4% for activity type, 95.4% for tone, and 98.7% for activity location. These levels are comparable with those reported by Baumgartner and Jones and indicate a very high level of inter-coder reliability. All instances of coder disagreement were excluded from the final dataset, ensuring that all of the data included in the dataset were reliable.

Once the final dataset was assembled, it was analyzed and summarized using Excel. The total *Globe & Mail* coverage of firearms-related issues and the tone of this coverage were summarized in Figure 2. Similarly, the types of firearms activities covered was summarized in Figure 3. These two figures served as the main data sources for our analysis of the Canadian firearms policy image and, in part, for firearms venue shopping, as well. The location of firearms activities covered was also graphically summarized, but the data showed that the proportions of coverage related to Canadian firearms activities and foreign firearms activities were fairly consistent over time, so this data did not figure prominently in the analysis and was not included in the chapter.