Director’s introduction

Knowing ourselves

The concept of Canadian Studies owes a great deal to Thomas Symons and his landmark 1975 report To Know Ourselves. In that report, Symons detailed the degree to which Canadian post-secondary institutions had previously failed to integrate and promote curricula and research on their own country. In subsequent decades, especially among the newer universities, like York University, institutions embraced the project, creating research centres and offering multidisciplinary degree programs under the rubric of “Canadian Studies.” The Robarts Centre for Canadian Studies is one of the products of that enthusiasm, benefitting from an endowment provided by the Canadian and Ontario governments and private benefactors who wished to recognize the legacy of former Ontario premier John Robarts.

Editorial

Editorial: The politics of evidence

This issue of Canada Watch is the outcome of collaboration between the Robarts Centre for Canadian Studies and the Politics of Evidence (POE) Working Group, an inter-university collaboration convened by Professor Natasha Myers. This working group brings together over 40 faculty and graduate student members from York University, the University of Toronto, Ryerson University, and other universities across the country. It was formed to “raise public awareness and to challenge existing barriers to research and the dissemination of research findings, whether such barriers come from the public or private sectors. By interrogating the uses and abuses of evidence, we seek to highlight where science and technology in Canada intersect with issues of social and environmental justice.”

You can read more about POE resources and activities on our website at https://politicsofevidence.wordpress.com.

While science is rarely at the forefront of political controversy, the current government has acted strategically to silence government scientists and to render their findings invisible. As detailed by articles in this issue, the Harper government has cancelled the long-form census, eliminated the office of the National Science Advisor, closed libraries, testing labs, parliamentary offices, and research programs, and interfered with researchers’ communication with the public. When research is veiled or cherry-picked by government offices, the policy implications of the research cannot be properly addressed. Further, some advocates of policy outcomes based on scientific research are targeted as hostile to the national interest. This practice is consistent with a notable and unprecedented centralization of power in the Prime Minister’s Office.

Scholars in Science and Technology Studies and in the history and anthropology of science and social science have shown that “science” and its evidentiary rules have evolved through...

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The Politics of Evidence

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Bibliography for Further Reading
Three decades before the release of Symons’s report, British Columbian newspaper editor Bruce Hutchinson had called his description of the nation Canada: The Unknown Country. Written primarily for an American audience, the title worked for a Canadian readership as well. Hutchinson won the Governor General’s award for non-fiction for this publication. One would not choose such a title today—not after the growth in support for the scholarly examination of the country. The study of Canadian literatures, histories, and societies increasingly became a legitimate field of inquiry. Canadian governments, particularly at the federal level, have played a significant role in encouraging Canadian Studies at home and abroad and in developing expertise in a wide range of scientific and social scientific areas. Government scientists, historians, and statisticians engaged with their university-based colleagues in furthering knowledge. Of course, the collection of information is never devoid of power—knowledge relations. But the recent sea change in Canadian federal government practices has starkly revealed the dangers of decisions to end such data collection or to limit the exchange of information between government employees and the public.

The articles in this issue of Canada Watch address a series of issues in which the current Canadian government has actively suppressed the study of the country and discouraged the dissemination of knowledge. Taken together, the essays encourage us, as citizens of the country, to recognize the impact of decisions to end the mandatory long-form census, to slash funding to public institutions such as Library and Archives Canada, to obstruct research into environmental and health issues, and to refuse to examine issues of pressing social concern.

One further example of such federal government cutbacks was the total withdrawal of support in 2012 for inter-national scholars who conduct research on Canada. Since the 1970s, successive federal governments had provided financial assistance to individual scholars and international associations of Canadian Studies, expanding the network of specialists to include some 7,000 scholars in 70 countries. With the sudden decision to end support, the larger associations had to let go long-serving administrators, reduce scholarly activity (conferences and journal publications), and, crucially, curtail financial assistance for young scholars to travel to Canada for research. (For more information on such decisions, see my activehistory.ca posts: http://activehistory.ca/2015/02/who-killed-canadian-studies/ and http://activehistory.ca/2015/06/if-stephen-harper-doesnt-support-canadian-studies-why-should-we/.) One of the effects of previous government funding had been to create a cadre of Canadianist specialists in many countries who were able to provide independent and informed commentary on significant cultural and political issues. The current government’s actions translate into a wrong-headed and ultimately self-defeating attempt to control such independent views. In effectively closing one of the older Canadian Studies centres in the United States, a Duke University official was reported to have exclaimed, “If Stephen Harper doesn’t support Canadian Studies, why should we?” Canadians can perhaps be forgiven for being ill prepared for a federal government that demonstrates open hostility to the independent and scholarly study of our own country.

Jody Berland, senior fellow at the Robarts Centre, with the assistance of Jennifer Dalton and Natasha Myers, has edited this collection of essays examining a series of decisions that restrict the collection and dissemination of knowledge about Canada. This project developed from an initiative of the Politics of Evidence Working Group, and the Robarts Centre is delighted to provide the venue to encourage discussion of these fundamental issues. We are particularly grateful to the authors of the essays and to Jody for her editorial prowess. Laura Taman, administrator of the Centre, shepherded this collection through the publication process.

There is no excuse for complacency about the study of our country. The current government’s decisions are harmful to the intellectual fabric of our nation. We should keep in mind that the cumulative effect multiplies the impact of the individual policy decisions. Ultimately, we Canadians bear the responsibility for “knowing ourselves.”
We seek to highlight where science and technology in Canada intersect with issues of social and environmental justice.
disqualify them from charitable status, you know the country is facing a ser-
ious problem that concerns not just sci-
ence, but democracy itself.

These practices of closure and sur-
veillance don’t just affect current pol-
icy discussions or outcomes. They also
threaten future research and where it
points us. Whether documenting fish,
drilling, water, oil leaks, or the treat-
ment of Indigenous peoples, many of
these materials are lost forever. Indeed,
“evidence” is not confined to the world
of natural resources, and “libricide” is
not confined to the collections of the
Departments of Science or Fisheries
and Oceans. The long-gun registry was
not just terminated; its records were
destroyed. The long-form census gath-
ered statistical evidence of changing
family, economic, rural–urban, and
social patterns that was essential to
making social policy responsive to peo-
ple’s actual needs. When it was can-
celled, the director of Statistics Can-
da resigned from public service. We
call this a “politics of evidence” in part
because it harms some communities
more than others. This government will
not order an inquiry into missing and
murdered Indigenous women, formulate
a response to the Truth and Re-
c onciliation Report, address the rights
of refugees, or tell the truth about the
Temporary Foreign Workers Program
and its impact on unemployment and
workers’ rights, because, as the prime
minister so cogently put it, “we don’t
do sociology.” Notably, the United Nations
Human Rights Committee just released
a report highly critical of the Canadian
government for its failure to address
these urgent issues (CBC News 2015).

Our ability to know what is happen-
ing in our country and to base reason-
able policy on this knowledge is being
shattered. Scientists and researchers
must be allowed to learn about the coun-
try and communicate their knowledge
with the public. Where evidence is sup-
pressed, public knowledge and aware-
ness are also suppressed, curtailing the
will for change. As the contributors to
this issue of Canada Watch show, miss-
ing evidence has significant implica-
tions for the safety and security of every-
one, whether it involves social, scien-
tific, medical, environmental, women’s,
LGBT and Indigenous peoples’ prob-
lems and histories, or the future of the
planet.

In the following articles, researchers
investigate the records and impli-
cations of the government’s war on sci-
eince in the contexts of Canada’s fish-
eries (Sutherland) and the selective
use of evidence to form forestry poli-
cies (Myers); the development of health
policies in relation to endocrinology
disrupters (Murphy), LGBT health pol-
icy (Mulé), and Indigenous health in
Vancouver’s Downtown East Side (Elliott);
the relation of science research to pub-
lc and political culture (Bazely); missing
and murdered Indigenous women (Dalton);
the evisceration of Canada’s National
Library and Archives (Mur-
ray); the cancellation of the long-form
census (Eichler); the collapse of Can-
da’s reputation in the international
world of science (Pinto); and the Truth
and Reconciliation Commission of Can-
da (Dalton). For more details on these
stories and larger issues of Canadian
science, policy, and research, please
consult the “Bibliography for Further
Reading,” provided by the contributors.

For their unstinting support for this
issue of Canada Watch, I thank Nata-
isha Myers and the Politics of Evidence
Working Group, co-editor Jennifer Dal-
ton, and Colin Coates and Laura Taman
in the Robarts Centre for Canadian
Studies.

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Imagining you are flying a plane carrying millions of passengers over unfamiliar terrain. Now imagine making the decision, mid-flight, to disable and destroy the instruments that tell you where you are, where you are headed, and allow you to coordinate with others sharing your airspace. It’s completely irrational, but that is exactly what the Conservative government did when it abolished Canada’s mandatory long-form census in 2010.

The long-form census once provided us with an essential view of the lay of the land in terms of our country’s social, economic, and health status. It was, indisputably, a critical tool for governance—indicating successes and failures through comparison with decades of consistent data collection. The information collected was used extensively by all levels of government, civil society, the private sector, and academics to make policies, establish new programs or businesses, and direct critical research. Without the long-form census, we are flying blind.

The government axed the census against the concerted advice of organizations from the left, the right, the middle and those who would not place themselves anywhere on such a continuum, but who simply need reliable data to do their work. Cities from coast to coast to coast objected, as did Chambers of Commerce, professional organizations, health professionals, churches, academics, two former Chief Statisticians of Statistics Canada and two former Clerks of the Privy Council—hundreds of organizations in total, all to no avail.

Yet, in the face of massive resistance, the government pressed ahead.

* “Flying Blind” was first published on The Harper Decade: Canada Has Changed blog (http://www.theharperdecade.com) on May 12, 2015. The article is reprinted with the permission of Margrit Eichler.

The long-form census once provided us with an essential view of the lay of the land in terms of our country’s social, economic, and health status.

Today, the consequences of abolishing the mandatory census and replacing it with a voluntary survey are as grim as were predicted. They range from bad to disastrous.

For example, it is bad that the responses to the voluntary survey in 1,813 subdivisions were so low that they had to be dropped from the data. It is bad that 21% of millionaires did not even participate in the survey. It is bad that some Aboriginal communities are entirely missing. Overall, the response rate dropped from 93.5% for the mandatory census to 68.6% for the voluntary one. The very rich and the poor and marginalized, including Aboriginals, people with disabilities, recent immigrants, people with low levels of education or with difficulties expressing themselves in one of the official languages are the ones who tend not to participate in voluntary surveys. This is bad.

But it is disastrous that we no longer have a current touchstone against which all other surveys can be compared. One of the most important, if rarely commented upon, functions of the mandatory census was that it was used to correct sampling errors in other surveys. For instance, if someone does a survey on traffic patterns, the researcher could, in the past, compare who responded to their survey with the census to see that each group was fairly represented—and if not, they would adjust the data. However, the voluntary survey is so unreliable that Statistics Canada used the 2006 census to adjust the 2011 survey. This becomes more and more ridiculous the further from 2006 we move.

So why would the government get rid of the best way of finding out what is going on in the country?

One hypothesis is that eliminating the census would save money. However, the voluntary household survey cost Canadians $22 million more than the regular census had cost. In other words, the government spent a total of $652 million on the 2011 voluntary survey, collecting crappy data that do not provide an adequate picture of Canada. Indeed, the most accurate picture we have of Canada is from the last mandatory census in 2006. We do not have an overview of what changes have occurred since.

Another hypothesis suggests that the government wanted to protect our privacy. However, it is Bill C-51—the so-called Anti-terrorism Act—that will truly invade our privacy. With the passing of Bill C-51, we will not know if or when we are under special surveillance. At least with the census we knew what questions we answered—and in any case, the voluntary survey asked the same questions the census would have asked—so this explanation does not hold water, either.

Flying blind,
What can a biologist learn about the science–policy–politics spectrum from working with social scientists?

OUT OF THE LAB

Being the director of IRIS (York University’s Institute for Research and Innovation in Sustainability) from 2006 to 2014 gave me the chance to get out of my lab and into the science–policy–politics space. This is an area that members of the STEM (science, technology, engineering, and medicine) community have tended to avoid in the last 25 years. However, increasing anti-science rhetoric and declining public trust in and knowledge about scientists have prompted scientists to engage with diverse publics and inspired conversations about the politics and policy of STEM research within the science community. At the 2014 Genomes to Biomes conference in Montreal, biology professor Scott Findlay of the University of Ottawa, a founder of the advocacy group Evidence for Democracy, gave a plenary presentation entitled “Recent Developments in the Support and Use of Science by the Canadian Federal Government.” York University’s Steacie Science Librarian John Dupuis has documented the Harper government’s cuts to research in general, and he organized the “Death of Evidence Funeral and Eulogies” during the 2013 International Open Access week celebrations at York University.

My own perspective on how my science community colleagues view their work in relation to policy formation and the politics of science has been informed by research collaborations with several political scientists, including Gunhild Hoogensen of Tromsø University. We have collaborated on the question of whether the human security concept, commonly applied to the global south in international relations, is relevant to the global north, particularly in arctic areas, where Indigenous peoples often have poorer health, higher suicide rates, and environmental conflicts with distant government centres over their access to land and traditional lifestyles. Our International Polar Year project examined the multi-faceted short- and long-term issues of oil and gas development from different kinds of security perspectives.

One of my research areas has been to determine whether the overtly political human security policy framework has any relevance for ecologists doing applied research with possible policy implications. Part of my research involved reviewing the science education, outreach, and engagement literature exploring the public understanding of science, to help understand what options are available for scientists who believe that their research and its implications are generally ignored in the wider world. Since I began this research in 2004, many more scientists have been discussing the need for us to better communicate our research to broader publics. These conversations are largely motivated by alarm at the declining number of Canadian and US citizens who trust and believe in science—for example, that of climate change and vaccination.

SHARED VALUES

While doing my research into the public understanding of science, I became intrigued by Ray and Anderson’s (2000) sociology research examining common values that people hold regardless of their political affiliation. Their surveys found 18 shared cultural creative values that cut across partisan political boundaries, including an interest in ecological sustainability and respect for women’s rights, both of which are components of the ethical frameworks for sustainability theory. This was some of the earliest research, subsequently expanded substantially, that has examined how personal values shape a person’s political views. Ray and Anderson (2000) also examined the link between individuals’ knowledge of natural and physical sciences research and the kind of environmental policies they are likely to support. Their research identifies subgroups within particular political groups with whom scientists interested in issues of science com-
munication and the public understanding of science should connect.

The extent to which ideology-driven policy persists, even in the face of contradictory data, is not only of concern in STEM research subjects. Greenspan and Doob (2012) raised the issue of federal Canadian criminal justice policy that runs in direct opposition to research results: “The minister of justice said he is not interested in evidence-based policy: ‘We’re not governing on the basis of the latest statistics,’ he said. ‘We’re governing on the basis of what’s right to better protect victims and law-abiding Canadians.’”

Scientists tend to consider themselves as being in a privileged and particularly apolitical, neutral, and objective position. The challenge for the science community is to understand how and why this is a mistaken view, although this may alienate some allies. Scientists must realize that all STEM research operates within political and policy frameworks. A better understanding of these frameworks will help scientists navigate the policy and politics interface, without mistakenly thinking that such negotiation must compromise the quality of their science research.

CLOSURE OF THE EXPERIMENTAL LAKES AREA

A variety of actions and responses to the current policy situation by “real scientists” illustrate this point. Retired biology professor emeritus, Ken Davey, FRSC, organized a 2012 science policy discussion panel consisting of provincial and federal members of Parliament, including Dr. Ted Hsu, the MP for Kingston and the Islands, at his local Liberal riding association. Dr. Hsu, the Liberal critic for science and technology, is a physicist who went into business and then into politics. He has been one of the most active Canadian politicians in bringing attention to the Harper government’s cuts to science, including the closure of the Experimental Lakes Area. Another York University biology professor, Norman Yan, spoke at a 2012 University of Toronto event, “Unmuzzled—The Urgent Need for the Vocal Aquatic Scientist in Today’s Political Climate in Canada,” about the Experimental Lakes closure. Neither of these actions compromised Yan’s and Davey’s science research, which is distinct.

One reason Canadian science has suffered so much at the hands of the current federal government may be that Canada has been a laggard in supporting and promoting the public understanding of science, though it is hard to tell which may be the driver. In the United Kingdom and the United States, there is more highly organized and institutionalized advocacy for STEM research. Science academics like Richard Dawkins and Jim Al-Khalili are mandated with boosting the public profile of basic research and hold chairs in public engagement with science.

PUBLIC SCIENCE IN CANADA

One of the solutions to closing the Canadian public’s science engagement gap is the “journalism boot camps” for scientists, organized to help them learn how to improve their interactions with the media and the public. These are run by the charity the Science Media Centre of Canada. At a 2012 York University journalism boot camp, I was asked to explain why I believe that scientists should communicate with the public about science. Here are my reasons:

1. The public are taxpayers, they fund you, and they deserve to hear directly from you, particularly in an era when there is evidence that some research is being suppressed by governments.
2. Outreach and engagement are increasingly written into funding requirements.
3. If scientists don’t communicate in plain language, someone else will do it for them.
4. Learning how to communicate in plain language can have the collateral benefit of enabling better interdisciplinary communication within academia, and increased research opportunities where...
large, interdisciplinary collaborations are required for funding.  

5. Such communication would help Canada catch up with the UK and US, which are ahead in the area of encouraging the public understanding of science.  

6. Communication helps position research that may have significant implications for scientific, medical, and environmental safety and security, policy, knowledge, and the future of the planet where people can find it. These implications may only be followed up if there is public knowledge of it and the publicly generated will to do so.

A March 2011 national public opinion poll carried out for Research America found that only 34 percent of Americans can name a living scientist. While there are few comparable data for Canada, the Expert Panel on the State of Canada’s Science Culture found in their 2014 survey that Canadians express high support for basic science research. Clearly, one means of building support for STEM subjects in Canada may be for civil society, including scientists, to connect the dots better between research and science policy by engaging with Canadian cultural creatives from all parts of the political spectrum. If scientists want to build support for basic research and evidence-based policy, Ray and Anderson (2000) argue that it could be a very good thing to link with a group that shares 2 of their 18 characteristics and values: being “strongly aware of the problems of the whole planet (global warming, destruction of rainforests, overpopulation, lack of ecological sustainability, exploitation of people in poorer countries)” and wanting “politics and government spending to put more emphasis on children’s education and well-being, on rebuilding our neighborhoods and communities, and on creating an ecologically sustainable future.”

WORKS CITED


Flying blind continued from page 6

However, the most likely answer is that they want us to be ignorant, and, perhaps even more troubling, they want to fly blind. Why? Because eliminating the census allows the government to gloss over a great number of issues—if we don’t know about a problem, we can pretend that it does not exist.

For instance, Canada is becoming increasingly polarized into the rich and the poor, as the middle class shrinks. That, however, is not the image we get from the voluntary survey (since the rich and the poor disproportionately failed to answer)—therefore we need not worry about it.

This hypothesis falls in line with a number of other actions by the Harper government, such as the abolition of the ocean pollutants and contaminants program. We no longer have a federal agency that informs us whether the fish we eat are safe or not, but since we don’t know, there cannot be a problem.

Or the abolition of the small (7 people!) smokestack team that used to travel the country measuring cancer-causing emissions and working with enforcement officers and industry to crack down on toxic pollution. Now that we don’t have this small team any longer, we can ignore the problem.

Or the muzzling of scientists who can no longer speak freely with the media, the public, or even among themselves. Reporting on climate change dropped by 80% within one year following the introduction of this policy. But if we’re not hearing about climate change, it must not be a problem.

It seems that our government likes to fly blind. The problem is, we are all sitting in the same plane. Once instruments have been as thoroughly destroyed as they have been by this government, it is not a simple matter to re-install them. And the crash will affect us all.
Evidence and investigation: The truth behind missing and murdered Indigenous women in Canada

**TRAUMATIC CONSEQUENCES**

In proportion to their population, Indigenous people are significantly overrepresented in Canada’s criminal justice system. Indigenous women are far more likely to be victimized than other women. The causes of both imbalances stem from historic government policies (for example, Indian residential schools, the Indian Act), which were aimed at assimilation, cultural destruction, and territorial dispossession. The result has been severe intergenerational trauma. This trauma has contributed to dysfunctional environments and higher crime rates, wherein Indigenous women are stereotyped, marginalized, and victimized in Canadian society and Indigenous communities.

The consequences are catastrophic, as shown by higher rates of Indigenous mortality, suicide, abuse, poverty, homelessness, illness, and addiction. Quality of life, health, housing, education, and employment are all significantly lower for Indigenous people than for those in Canada’s general population. Socio-economic marginalization of victims and poverty are roots of victimization. Indigenous women face the double disadvantage of gender stereotypes and racial discrimination (Aboriginal Healing Foundation 2004, 2008; Bombay, Matheson, and Anisman 2009; Erasmus and Sanders 1992; Haskell and Randall 2009; Rice and Snyder 2008; Wesley-Esquimaux 2007).

**URGENT NEED FOR STUDIES**

The phenomenon of missing and murdered Indigenous women has been dismissed by the current government of Canada as constituting nothing more than a series of criminal events. Rather than heed calls for a national inquiry, the government has taken a piecemeal approach that does little to recognize or address the seriousness of the matter. I argue that this approach is consistent with the current government’s approach to Indigenous issues across the country. There is an urgent need for full statistical evidence on missing and murdered Indigenous women to reduce this epidemic. There are no studies that provide complete data on missing and murdered Indigenous women. The RCMP released a report in 2014 with data covering 1980 through 2012. These data indicate that 1,181 Indigenous women went missing or were murdered during this time frame: 164 are missing, while 1,017 were victims of homicide. The RCMP report concedes that Indigenous women are overrepresented among all women. Indeed, the report concluded that “the total number of murdered and missing [Indigenous] females exceeds previous public estimates” (RCMP 2014). Most telling are the data reflected in Table 1, which highlight the degrees of overrepresentation of Indigenous female homicide victims in each province and territory.

The rates of female Indigenous homicides are much higher in the western provinces and northern territories. Indigenous populations are higher in these provinces, as highlighted in recent Canadian census data. The most recent

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**Socio-economic marginalization of victims and poverty are roots of victimization.**

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**TABLE 1 Female Homicides, 1980–2012**

<table>
<thead>
<tr>
<th>Province/territory</th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
<th>Unknown</th>
<th>Indigenous victim proportion</th>
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<tr>
<td>NL</td>
<td>10</td>
<td>57</td>
<td>1</td>
<td>15%</td>
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<tr>
<td>PE</td>
<td>0</td>
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<td>163</td>
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<td>NB</td>
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<tr>
<td>QC</td>
<td>46</td>
<td>1,445</td>
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<tr>
<td>ON</td>
<td>114</td>
<td>1,901</td>
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<td>6%</td>
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<td>196</td>
<td>188</td>
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<td>49%</td>
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<td>SK</td>
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<td>NU</td>
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<td>5,439</td>
<td>95</td>
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*Source: Royal Canadian Mounted Police (2014).*
TABLE 2 Indigenous Identity by Province/Territory

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<th>Indigenous population</th>
<th>Indigenous proportion of population</th>
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<tr>
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<td>35,800</td>
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</tbody>
</table>


National Household Survey of 2011 indicates that 4.3 percent of the entire Canadian population self-identifies as Indigenous. The provincial and territorial population breakdown is provided in Table 2. Given that Indigenous women constitute approximately half of those who self-identify as Indigenous, and thus half of the numbers shown in Table 2, most of the Indigenous female homicide rates in Table 1 are significantly higher than the population proportions of Indigenous women in each province or territory.

**IGNORED REPORTS**

Why is this so? The dearth of previous studies on missing and murdered Indigenous women reflects broader systemic stereotypes in Canadian society. The Native Women’s Association of Canada (NWAC) conducted extensive research and consultation as part of its Sisters in Spirit initiative, culminating in a final report submitted to the Department of Justice in 2011 (NWAC 2011a). As part of her doctoral dissertation, Maryanne Pearce presented an extensive study with new data on victims in 2013. One month after the release of the RCMP report in March 2014, the House of Commons Special Committee on Violence Against Indigenous Women released a report. The government ignored this latter report’s recommendation for a public inquiry (Bar- ton 2014). Each study presented some data, but none provided figures as extensive as those in the RCMP report. The fact that such data were not readily available until 2014 gives one pause.

However, these data are still inadequate. The original information collected by the RCMP has not been made public, and there exist significant inconsistencies across the data presented in different studies. Most striking are the data related to solve rates of missing and murdered victims. The RCMP report indicates that solve rates for murdered Indigenous women are approximately the same as for non-Indigenous women, at close to 90 percent. NWAC’s research shows a drastically lower solve rate of only 53 percent for Indigenous female homicides (NWAC 2011b). Further, according to NWAC, Indigenous women are “almost three times more likely to be killed by a stranger” than are non-Indigenous women; most perpetrators are men who are both Indigenous and non-Indigenous (NWAC 2011a). These data are in stark contrast to the most recent RCMP assertion that 70 percent of perpetrators of violence against Indigenous women are Indigenous men (Galloway 2015).

Systemic stereotyping and discrimination also undermine efforts to collect complete and accurate data. There has been a demonstrated lack of consistent and accurate interjurisdictional sharing of information. There has also been insufficient accountability of law enforcement to victims and victims’ families, inasmuch as police officials may not communicate proactively or respond sufficiently to concerns about victims. Indigenous organizations, communities, and the public need to collaborate to maintain complete and accurate data on violence against Indigenous women, including data on missing and murdered victims. There have been some efforts to create databases on missing and unidentified persons, but significant gaps remain. The Government of Canada recently announced the creation of a DNA-Based Missing Persons Index by 2017 for missing and unidentified individuals, but it will not pay for DNA testing in missing-persons or unidentified-remains cases. The result will be insufficient funding to test and create enough DNA profiles to link cases or compile adequate data for the 697 or more cases of unidentified human remains in the country (Carlson and D’Aliesio 2015).

**THE NEED FOR A PUBLIC INQUIRY**

The common key, in nearly all studies and reports, has been the emphasis on the need for a public inquiry to remove the stigmatization that leads to incomplete and inaccessible data. Stereotypes need to be unlearned and criminal justice reforms are necessary. For these reasons, a public inquiry is most appropriate, despite claims of the Government of Canada to the contrary.

Public inquiries can be more costly and time-consuming than other approaches, but they serve a number of vital purposes that cannot be readily achieved through other means. First, public inquiries hold significance for good governance. Second, they raise public awareness of vital issues of national importance. Third, they contribute to effective justice administration, includ-
ing criminal justice. Fourth, they provide a level of independent and objective review and analysis at a much more extensive level than other reports or studies may achieve because they are granted broad powers under their enabling legislation. Fifth, they provide informed public policy recommendations and suggestions for progressive reform. Sixth, public inquiries have the power to reveal causes and consequences of significant public problems (Ipperwash Inquiry 2007, vol. 3, 2). Finally, when a government turns a matter over for public consideration and review, it is indicating the sheer significance of an issue or problem and its own dedication to achieve meaningful change. The fact that the current federal government continues to fight against a public inquiry undermines broader objectives to address the epidemic of missing and murdered Indigenous women. It also speaks volumes about the government’s approach to Indigenous peoples and their quality of life across the country. This must stop, and it must stop now.

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Suffering and the fervour of statistical evidence in Vancouver’s Downtown Eastside

HASTINGS AND MAIN

“...is nowhere else like it.” “It’s a place like no other.” “Canada’s poorest postal code.” “The highest rate of HIV in the Western world.” These are epithets commonly used to describe the Downtown Eastside in Vancouver, British Columbia. It is a place of vibrant energy, of compassion, hope, love, and heartbreak, a place of generosity, and a place of social suffering and marginalization. The heart of the neighbourhood is the intersection of Hastings Street and Main Street, or what many locals refer to as “Pain and Wasting.” This moniker conjures up images more commonly associated with the neighbourhood, characterized all too frequently with reference to illicit drug trafficking, public use of injection drugs and inhalation of crack cocaine, intense poverty, crime, violence, and a concentrated street-level sex industry.

Its residents include displaced Aboriginal peoples, deinstitutionalized mentally ill people, working-class men, and impoverished new immigrants who are too poor to relocate elsewhere. The 2010 Olympics spurred an intense gentrification project that rendered the community almost unrecognizable as hipsters, artists, students, and middle-class urbanites flocked to the neighbourhood for housing and upscale boutique shopping, displacing the poor. Many of the urban poor live in substandard housing or sleep on the street, their lives bundled up in shopping carts.

Like Francis, whom I met on July 21, 2005. My ethnographic fieldnotes from that day read:

At HIV group yesterday I met Francis—a tall Aboriginal fellow who I had seen around the C.t. earlier in the day. He has some infections in his legs or feet, they are bandaged up, when he walked into the clinic earlier in the day he was only wearing hospital paper slippers on his feet. He slept through the part of the meeting, not saying anything—I had wondered if he was mentally ill; but later he awoke and was a bit more chatty. After the group, which lasts an hour, they go somewhere to eat—they have a $5 limit each—which actually buys a full meal at Flowers Café. There I sat with Francis and Jackson—Francis read bits and pieces of the newspaper to us. I asked him about his feet, he said he hadn’t been taking care of himself lately, and that he is sleeping in the rough. I asked him if he came to group often, he said he used to but that he had not been attending lately, that he’d been doing his own thing lately. According to the nurse—the hospital discharged him earlier but they were unable to find him anywhere to stay. The group leader was taking him for the night to his recovery house but he [the group leader] needed to be convinced/coerced by the nurse. They tried to find him another pair of shoes—someone found a pair of loafers.

PUBLIC HEALTH EMERGENCY

In 1996 the city of Vancouver declared a public health emergency in response to unusually high statistics reported by the coroner’s office about rates of HIV infection and drug overdoses in the Downtown Eastside. The public health emergency subsequently became the impetus for the development of new enumerative technologies to count, classify, and track peoples, bodies, diseases, and social behaviours. Counting requires subjects. The HIV patient and the drug addict (or more specifically, the drug-addicted HIV patient) emerged from these figures as evidence, influencing health authority interventions (for example, a focus on the supervised injection site at the expense of a provincial AIDS strategy), clinical encounters, urban health centre policies, and the ways in which police and ambulance respond to those who make the Downtown Eastside their home (Elliott 2014).

Aboriginal men like Francis become simply numbers in all the counting. Numbers represent all sorts of things; but they fail to account for the suffering of Aboriginal Canadians like Francis. Statistics are critical capital used to justify all kinds of political action and inaction. Amidst all the calculations and enumerations, Francis was somehow abandoned. On December 4, 2005 Francis died on the street. He was found unresponsive at 8:35 a.m. by emergency services. What is particularly disturbing about this event is that the night before, at 11:30 p.m., a friend of Francis’s called 911 to report that Francis was sleeping on the street during a particularly cold night (temperatures dropped below zero degrees) and that he was feverish and appeared acutely ill. The coroner’s report of this event reads:

An ambulance crew arrived at the Unit Block of East Hastings at approximately 2346 hours. There, the paramedics observed a male...
who was wrapped in blankets and was sleeping positioned against a fence on the north side of the street. The paramedics woke this individual and were told by him that he did not need an ambulance. The ambulance crew then left the area. [Emphasis added.]

In the morning they were called back:

An ambulance crew attended to the scene at 0838 hours and attempted resuscitative measures which were unsuccessful and [Francis] was declared deceased at the scene.

His death was deemed the result of “natural causes”; the coroner’s report says he died of pneumonia. In fact, Francis’s death was far more complicated than that. He died in a community plagued by research, statistics, and evidence documenting suffering resulting from historical violence and contemporary neglect, evidence that is ignored by provincial and federal actors, leaving Francis and others like him abandoned by the state.

**NUMBERS AS EVIDENCE**

In many areas of science and medicine, numbers become visible and most potent as “evidence.” As Mykhalovskiy and Weir have noted (2004), the evidence-based medicine paradigm has been one of the most influential initiatives shaping modern biomedical practice. The emphasis on providing evidence before implementing preventative, therapeutic, or caring interventions, particularly for HIV and hepatitis C in the Vancouver context, resulted in a mass of epidemiological and clinical research projects seeking “evidence,” a valuable commodity in the local industries of health delivery and medical research.

Statistics are not only a means of compiling data and providing information, they are also “part of the technology of power in a modern state” (Hacking 1991, 181); they operate as normalizing and surveillance instruments. Counting and classifying are part of the modern state’s technologies of regulation and management of populations in colonial and postcolonial contexts (Foucault 1991). Such forms of evidence are critical to Stephen Harper’s government, whether or not the evidence results in appropriate policy. In the Downtown Eastside, health statistics comprise a “moral science” for what they tell scientists, the public, and policy-makers about the social lives and public health of area residents. Here, as with many Aboriginal communities in Canada, we paradoxically see an overproduction of statistical evidence that is then ignored or hidden when such evidence reflects poorly on the state itself, or demands policy and action that is not consistent with the politics of the leadership (as is the case with the office of Prime Minister Stephen Harper).

One of the most comprehensive studies documenting the lives and contemporary experiences of Aboriginal peoples, the report of the Royal Commission on Aboriginal Peoples, released almost 20 years ago in 1996, clearly documents the social, political, economic, and health impacts of colonialism on urban, rural, and reserve Aboriginal communities. Since then, Aboriginal communities, including urban Aboriginal communities like the Downtown Eastside, have been overstudied. Research papers and reports, one after the other, have documented suffering, illness, and displacement, but rarely are these studies followed by effective and compassionate action.

**INACTION AND INDIFFERENCE**

The most recent report by the British Columbia Representative for Children and Youth, Mary Ellen Turpel-Lafond (2015), sadly highlights how the state not only continues to ignore the suffering of Aboriginal communities in spite of overwhelming evidence, but also contributes to their suffering with policies and practices that penalize the Aboriginal urban poor (for example, a discriminatory justice system resulting in an overrepresentation of Aboriginal peoples in the Canadian correctional system and a prejudiced child welfare system with twice as many Aboriginal children in care as non-Aboriginal children). The fervour around collecting evidence occurs alongside the states’ inaction and indifference to lives of individuals like Francis.

Statistics as a science of the state act as a governing technology not only in the ways in which they count and make up subjects and populations, but also in the ways in which statistics are selectively engaged, ignored, hidden, or denied by states. Although we have witnessed many cases historically and in the contemporary period in which evidence is withheld by state actors, in this context we should seriously reflect on how much evidence is actually required in order for the state to respond in a humane and caring way to reduce the intense suffering experienced by so many in Vancouver’s Downtown Eastside.
Reclaiming the people’s memory

POSSIBILITIES AND FAILINGS

K
owling our democratic selves, our
democratic possibilities, and most
crucially our democratic failings steers
us toward greater freedom and justice
in Canada and beyond. With these
thoughts in mind, I offer a personal
reflection on the erosion of the peo-
ple’s memory at Library and Archives
Canada under the government of Con-
servative Prime Minister Stephen Harper.

The people need to reclaim their national
archives, and during this federal election
year it is essential that we do.

AN INSTITUTION’S
METAMORPHOSIS

I was not prepared for 395 Wellington’s
metamorphosis when I returned in the
spring of 2015, after several years away.
Parts of the second floor, formerly alight
with activity, stood eerily dark and silent.
During the now much shorter time
frames when it appears, a skeletal staff triages visitors toward or away from
archivist consultations—mostly away,
as far as I could tell. Evidently as a mat-
ter of policy, in the first instance, the
staff directs researchers toward the
computers, even though it is easy to
see that Library and Archive Canada’s
digital interface is a cumbersome and
often useless creature. In any event,
there is no substance to the as-much-
as-possible-full-digitization-dream for
the near future or ever. In 2014, the aud-
itor general released a scathing report.
It illustrated the weaknesses of the dig-
tal system, the incompleteness of find-
ing aids, and the languishing of uncol-
clected and unprocessed records (Aud-
itor General of Canada 2014).

A THREAT TO DEMOCRACY

Despite vague claims of modest invest-
ments during this election year, cuts at
Library and Archives Canada have had
a devastating and possibly irreversible
impact. Harper’s ministers of Canad-
ian heritage and official languages over-
saw much of these rollbacks, especially
solemn places, shells of a lost past. Often cash-strapped community organ-
izations used to convene events free
of charge in some of these spaces, but
no more (Public Works and Govern-
ment Services Canada 2015). In 2007,
a World Book Day exhibit was held in
what is now a sterile and dead room
with fully stocked junk food machines.
Today, only a small strip of the foyer
holds archival installations. At the entry
level of 395 Wellington, a prohibition
on Library and Archives Canada sign-
age is apparently in place. An old
notice in the coatroom remains. It pro-
phetically cautions patrons that the
national archives will not be held respon-
sible for valuables left behind.
James Moore (2008–2013) and Shelly Glover (2013–present). Some of the most shocking changes have happened since 2012. Library and Archives Canada’s budget (already under pressure) was slashed by millions, leaving it in 2014 with a budget of just 58 percent of 1990–91 levels (adjusted for inflation). Its archival and library staff complement was lacerated. Two hundred and fifteen positions were made history, including 21 of 61 archivists and their assistants, as well as half the digitization staff. Through a “secretive digitization” agreement with a private consortium, part of Canada’s heritage is now available for purchase (Bibliocracy 2013). The interlibrary loan service was folded. Acquisitions were starved. The world-renowned National Archival Development Program, which sought a diverse record of our past, was dismantled.

Archivists, librarians, and staff were and are muzzled, ordered to adhere to a “duty of loyalty” to the “duly elected government.” The government has set up a snitch line to dissuade anyone from getting out of step (Canadian Association of University Teachers 2011; Munro 2013; Turk 2014). Contrast this with the National Archives of Ireland, which opens newly declassified records with great fanfare. Last year, for three days, the whole place shut down as the press had a go at hitherto unknown facets of Ireland’s past. Archivists diligently helped reporters find the juiciest nuggets to feed the world, and the photocopier was rolled in to make everything nice and convenient.

CONSEQUENCES OF CUTS
Consider these changes in the context of injustices toward Indigenous peoples. Library and Archives Canada’s transformations have undoubtedly stoned-walled Indigenous peoples hoping to gather documentary evidence to assert their constitutional rights. These cuts also stymied efforts to collect every shred of data on the “national crime” (Milloy 1999) that was the residential school system. Such obstructions are reminiscent of those that surrounded the Royal Commission of Inquiry to Investigate and Report the Circumstances in Connection with the Alleged Flogging of Indian Pupils Recently at Shubenacadie Residential School. Struck by Conservative Prime Minister R.B. Bennett in 1934, the commission’s records were largely destroyed years ago in a seemingly obvious attempt to erase from memory this dark episode of Canada’s history. With the assistance of Library and Archives Canada experts, I tracked down remnants of evidence that shed light on how this patently biased commission sanctioned barbaric acts against children in residential schools. What alternative democratic futures might have been imagined and realized decades ago with full researcher access to the official record for study, contemplation, and discussion? How much suffering might have been prevented? How many lives might have been spared—thousands, maybe? We must ask such unsettling questions of Stephen Harper’s government and its refusal to strike a royal commission on murdered and missing Indigenous women and girls; its apparent disregard of the tar sands contamination of Indigenous peoples’ traditional food sources; and its discounting of the urgent need to address global warming. Will our national archives hold the answers we seek?

A CALL TO RECLAIM NATIONAL MEMORY
During my visit, I pass by the Supreme Court and then Parliament, nestled together as they are with Library and Archives Canada on the south side of the Ottawa River. Troubling questions come to mind. What happens when a country loses its ability to research itself, to reflect upon itself, to judge itself, to know itself? What occurs when so-called representatives of the people use and attack the national memory for partisan gain, for ideological buffoonery, or to prevent justice? What comes to pass when a government leaves its archives in a state of ruin? When is a presumed democracy no longer worthy of its name? The painful truth is that, like the bottom of a fragile archival box, a foundation of Canadian democracy seems to be giving way. Buried histories serve the interests of the powerful, and not those of the everyday people. This is a nightmare and not what my mother’s beloved brother, my Uncle Joe, sacrificed his life for on February 17, 1945.

The people need to reclaim their national archives, and during this federal election year it is essential that we do. Let’s reignite Library and Archives Canada’s democratic potential. Let’s visit 395 Wellington Street in unprecedented numbers. Let’s makes it a cele-

Through locked doors at the north side exhibition room.
brated ritual to go there first, before we take our tours of the Supreme Court and Parliament. Let’s express our anger at what some might call a desecration. Let’s insist on tours of the lost spaces as we would an ancient city. Let’s peer into the space of that once wonderful café, so precious and meaningful that people wept at its passing. Let’s insist on speaking with archivists. Let’s place interlibrary loan orders with abandon and demand their fulfillment. Let’s make voluminous access to information and privacy requests to find out why this transpired. Let’s cast our votes for a government that cherishes collective knowledge, shared history, facts, and truth. Once thought protected at Library and Archives Canada, our national memory needs us now to defend it. We are standing in the ruins. We don’t have any time to waste.

NOTES

* To the memory of my brother Kevin David Murray (1958–2015), who lovingly guarded the memory of his Uncle Joe. Appreciation is extended to Jody Berland, Colin Coates, Janet Friskney, Phillip Hansen, Fay Hutchinson, and David Mutimer for providing comments that significantly enhanced the analysis herein. All errors are of course my own.

Photographs of 395 Wellington Street are used with the permission of Public Works and Government Services Canada.


AMPLIFYING THE GAPS BETWEEN CLIMATE SCIENCE AND FOREST POLICY: THE WRITE2KNOW PROJECT AND PARTICIPATORY DISSERT

THE POLITICS OF SCIENTIFIC EVIDENCE

I stumbled on a story about the fraught politics of scientific evidence in Canada while conducting research into the ways that scientists talk about forest ecologies. This research felt pressing at a time when the effects of climate change are making Canada’s forests increasingly vulnerable to attack by insects such as the eastern spruce budworm and the mountain pine beetle, and to more frequent and devastating fires. As an anthropologist, I wanted to understand how ecologists understand relationships among species, and how they build on or resist conventional scientific models of ecosystem dynamics to manage forest health.

From a close reading of the scientific literature, I found that there are all kinds of constraints on what ecologists can and cannot say; a whole range of permissible and impermissible ways of thinking and talking about forest ecology. Researchers are careful about what they say, and actively police one another to ensure that their explanations stay close to conventional scripts. The ecological models they rely on are grounded in an economic logic that subjects ecosystems to calculations of energy expenditures and resource use. Studies of forest nutrient cycling, for example, are concerned with nutrient sources and sinks, and the calculation of energy inputs and outputs. The behaviours of plants and insects in forest ecologies are modelled on a militarized economy in which plants are envisioned as conducting a kind of “chemical warfare” to resist insect pests, and their airborne signals are treated like botanical versions of Morse code (Hustak and Myers 2012). I wanted to understand how these pervasive metaphors shape what can and can’t be known about forest ecologies today.

SCIENTIFIC COMMUNICATIONS BUREAUCRACY

Collecting information from the Canadian Forest Service website, I realized that my framing of the constraints on ecological discourse was too narrow. Discourse is not just what is said: it includes the conditions of possibility for what can and what cannot be said. It turns out that the constraints on ecological discourse in Canada are not just shaped by the scientific community. What federal scientists can say and know is being dictated directly by their bosses. Far less subtle than the forces that shape scientific debates in research networks, what these scientists can and cannot say about their research to the Canadian public is being controlled by government and industry interests.

A massive scientific communications bureaucracy regularly intercepts journalists’ requests for interviews with federal scientists working on “sensitive” issues like climate change, oil sands pollution, or the impacts of industry on biodiversity. Some requests are sent all the way up to the Office of the Privy Council, which reports directly to the prime minister. Scientists are being told...
what they can and cannot share about their publicly funded research. This is an obstruction of their right to communicate freely, and the public’s right to know about the health and safety of their bodies, communities, and environments.

This issue was first made public in 2011, when reports began circulating about the government’s attempt to muzzle a federal fisheries scientist whose research was shedding light on the failure of wild salmon stocks (Monro 2011). In response, organizations like Evidence for Democracy and Our Right to Know began to challenge the government’s cancellation of environmental research programs, the firing of scientists, the closure of libraries and archives, and the cancellation of the long-form census. Numerous reports showed that federal scientists’ findings were being suppressed in the interests of pro-industry government policies, and that these policies were removing the impediments to industrial development and resource extraction by lifting requirements for environmental assessment and monitoring programs (Chung 2013; Linnit 2015; McSorely 2013).

**INDUSTRY-FRIENDLY POLICY AGENDA**

What I discovered, looking closer at the issue, is that government policies were also directing the research agendas of federal scientists and selectively appropriating scientific models that would benefit an industry-friendly policy agenda. The first clue was a public relations video hosted on the Natural Resources Canada website, under the category of Forest Resources (2013). The video features an interview with senior Forest Service scientist Dr. Werner Kurz, who specializes in the impacts of natural disturbances, forest management, and changing land use for forest carbon budgets. The video, set to ambient, orchestral music, moves between Kurz speaking to the camera, majestic views over old-growth forest landscapes, and scenes featuring the technological prowess of the timber industry. Kurz’s narrative conveys to a lay public how climate science is shaping government forestry policies:

Canada owns about 10% of the world’s forests. [W]e have a stewardship responsibility to understand how these forests contribute to the global carbon cycle in the exchange of greenhouse gases with the atmosphere. The research that we are doing ... is aimed at quantifying the contribution of Canada’s forests to the global carbon cycle. One of the differences between managed and natural forests is that in the natural forest carbon is taken up from the atmosphere by trees and recycled back into the atmosphere through decomposition and forest fires. In the managed forest, we take the wood and the carbon to meet society’s needs. A managed landscape tends to store somewhat less carbon than a natural forest landscape, but because it’s generally younger forests, that landscape takes up much more carbon from the atmosphere.

Conventional models of carbon cycling describe forests as carbon sinks that can absorb carbon from the atmosphere.1 By reducing atmospheric carbon, they appear to offset sources of carbon from industry and elsewhere. But forests are not just carbon sinks; they are also potential sources of atmospheric carbon, especially as they become prone to frequent forest fires. In this video, Kurz explains how young, managed forests absorb more carbon from the atmosphere than old-growth forests, envisioning a future Canada that can mitigate climate change by bringing all old-growth forests under forest management.

Climate researchers are currently trying to figure out how to model the contribution of forests to global carbon budgets, but Kurz’s claim short-circuits that debate. While climate change is undeniable, climate models and modelling techniques are only as good as the data that is put into them (Edwards 2010). There is an intensive debate as to what data should be used to best calculate forest carbon budgets. Researchers are learning that available models are inadequate, and that intensive forest management may actually increase the release of carbon from logged forests (Buchholz et al. 2014; McKechnie et al. 2014). Researchers have not yet achieved a consensus on how or whether to include forest carbon stocks in global atmospheric carbon budgets. Debates over the reliability of the data and the models make it highly problematic for governments to base their forest policy solely on these models. Indeed, a managed forest policy based only on carbon cycling contradicts well-established scientific evidence on the role of old-growth forests in maintaining biodiversity, plant and animal habitat, water and nutrient cycling, and soil stability.

**QUESTIONING THE GAPS BETWEEN EVIDENCE AND POLICY**

I wanted to talk to Kurz about the gaps between scientific evidence and forest policy. I wanted to ask him: How do your findings account for debates in the climate modelling literature around best practices for the inclusion of forests in global carbon budgets? Are there gaps in your models and data that might cast doubt on a policy that promotes managed forests over old-growth forests? Do you feel that the full range of research is being considered in Canada’s forestry policy? Is the government using these climate models and carbon budgets to promote increased resource extraction and industry-friendly policies? I knew that my attempts to...
contact Kurz directly would be deflected. So I co-created a campaign that enables members of the public to pose these very questions to Kurz.

Co-organized with Dr. Max Liboiron, and with support from the Politics of Evidence Working group, the Write2Know Project (http://write2know.ca) was launched in March 2015 to draw public attention to government obstructions to our right to know. Write2Know offers a platform for people to pose questions to federal scientists on matters of public and environmental health and safety. Write2Know Week (March 23–27, 2015) mobilized hundreds of people across Canada and around the world to send over 3,000 letters to federal scientists and ministers. Each of the letters addresses serious gaps between research and government policy. In addition to a letter to Kurz on the misuse of evidence to promote resource extraction from Canadian forests, the letters grapple with oil sands pollution, the impacts of marine plastics, the cancellation of Aboriginal health programs, the destruction of archives, contamination in the Far North, and more. This campaign explicitly foregrounds ongoing colonial regimes that propagate environmental racism and keep Aboriginal communities disproportionately vulnerable to cuts to environmental monitoring and social research.

Our first Write2Know Week featured eight pre-drafted questions and letters. Federal scientists received one copy of the letter at the start of the campaign, and each quarter they receive an update listing the hundreds of people who have signed that letter. Federal ministers and ministry critics in opposition parties receive an email each time someone signs a letter. Though we have yet to receive a reply from Kurz and the ministers who oversee his work, we have received supportive responses from critics of government ministries. We are making these issues heard by the very people who can change the debate in Parliament.

A SCIENTIFICALLY LITERATE PUBLIC

Rather than securing a division between expert scientists and a lay public, or a public dependent on scientists as the sole arbiters of truth, the letters demonstrate a scientifically literate public wanting to help shape the direction of inquiry. The campaign is thus not merely a call for access to the facts of positivist science, but for a more inclusive and collaborative form of inquiry responsive to the needs of communities and the toxic ecologies of “late industrialism” (Fortun 2012). As a robust platform for participatory democracy and a new kind of “civic technoscience” (Wiley et al. 2014), Write2Know will continue to connect communities and educators with Science and Technology Studies researchers and grapple with issues where science and technology intersect with social and environmental justice.

NOTES


WORKS CITED


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**Vancouver’s Downtown Eastside** continued from page 14

**WORKS CITED**


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**Canadian Studies Network**

**Réseau d’études canadiennes**

*The CSN-REC facilitates communication among Canadianists and holds an annual meeting to discuss issues of mutual concern and new developments in Canadian Studies.*

http://www.csn-rec.ca
The Cohen report and the black hole of indifference

THE EVIDENTIARY EVENT HORIZON

The Cohen report (2012) on the decline of sockeye salmon populations is drifting toward a black hole of indifference, and the Harper government is nudging it ever closer to the event horizon. If the Cohen report, its findings, and recommendations fade out of existence, so too does our best chance at rescuing sockeye salmon from extinction.

The Cohen report was released to the public on October 31, 2012, almost three years after BC Supreme Court Justice Bruce Cohen was tapped to lead a federal inquiry into the precipitous, decades-long decline of sockeye salmon in the Fraser River. In his role as commissioner, Cohen left no evidentiary stone unturned: he commissioned scientific research projects, hosted public forums, conducted site visits, and invited written submissions from the public. Most significantly, Cohen held 133 evidentiary hearings over an 18-month period, during which he heard 179 witness testimonies. On the basis of myriad evidence, Cohen offered 75 recommendations. Together, these recommendations provide an inclusive, pragmatic, and well-informed roadmap for addressing the decline of sockeye. And yet, here we stand, more than two years after the Cohen report was delivered, and the minister of fisheries and oceans has only grudgingly acknowledged its existence.

BY CALLUM C.J. SUTHERLAND

Callum C.J. Sutherland is a PhD student in Science and Technology Studies at York University.

[H]ere we stand, more than two years after the Cohen report was delivered, and the minister of fisheries and oceans has only grudgingly acknowledged its existence.

BILL C-38: THE LEGISLATIVE SABOTEUR

In hindsight, this passive undermining of the Cohen report is hardly surprising. Having emerged from the 2011 federal election with a majority mandate, the Harper government wasted precious little time in implementing its scorched-earth economic agenda. To that end, the government passed Bill C-38 in mid-2012, bringing about sweeping changes to dozens of environmental laws, including the Fisheries Act. These amendments pre-empted the Cohen report by several months, forcing the inclusion of an addendum with its eventual release. In the addendum, Cohen describes Bill C-38 as having “a significant impact on some of the policies and procedures ... examined by this Commission and on important habitat protection measures in place at the time of the evidentiary hearings” (Cohen 2012, 71). These amendments, Cohen continues, seem to “narrow the focus of the Act from protecting fish habitat to protecting fisheries” (78). Indeed, while Cohen never explicitly says as much, this final point seems to reflect the general purpose of Bill C-38: the privileging of ideology over evidence, capital over labour, transnational over local, fisheries over fish, farmed salmon over wild salmon.

This revised legislative focus brings us to one of Cohen’s most disconcerting findings. That is, having seen its role expanded to include the promotion of the salmon-farming industry, Fisheries and Oceans Canada (DFO) appears to be mired in a conflict of interest that Cohen argues “might, in some circumstances, prejudice the health of wild salmon stocks.” (Cohen 2012, 90). Citing the precautionary principle, Cohen concludes that the “potential harm posed to Fraser River sockeye salmon from salmon farms is serious or irreversible” (92). Why, then, has the Harper government refused to address this conflict of interest? Because, as the DFO boasts on its own website, aquaculture is “the fastest-growing food sector in the world” (DFO 2014). More than illustrating its preference for farmed salmon over wild salmon, this statement demonstrates the government’s predilection for the transnational and its disdain for the local. Indeed, the vast majority of salmon farms in British Columbia are now operated by foreign-owned corporations. In pledging its ongoing financial, promotional, and political support for salmon farms, the Harper government is undercutting the conservation efforts not only of the Cohen commission, but also of the First Nations and other citizens of British Columbia.
Not knowing about the chemicals in our bodies*

WAYS OF NOT KNOWING

What do we know and not know about chemical exposures and endocrine-disrupting chemicals (EDCs)? We know from national biomonitoring studies that everyone reading this article has within them right now industrially produced and endocrine-disrupting chemicals. We know we are all altered, materially, by the industrially produced chemicals of this era. While our government likes to address us as *Homo economicus*, whose primary purpose is to give value to our national economy, maybe we have become *Homo toxicus*. Where do these chemicals inside us come from? And what do they do? And what would stop you from answering these questions? What roles do science and government policy play in cultivating our capacities to not know?

There are at least four ways of not knowing about industrially produced chemicals and their effects. The first has to do with chemicals themselves. There are tens of thousands of industrially produced chemicals, each with distinctive properties. Moreover, chemicals are commonly beyond our perception—we often cannot see, taste, or smell them. They bioaccumulate in ecosystems, or travel through our water and air, or move across the planet through global logistics chains as consumer items. Further, there is a delay between exposure and, later, when a doctor tells you that cancerous cells have been detected inside you, or a lag between fetal exposure and a diagnosis of asthma. There is an even longer gap when it comes to endocrine-disrupting chemicals. Exposure to these chemicals to an adult body affects a fetus potentially in that body, which shows itself in the children that fetus might someday have. With EDCs, effects can manifest in two, three, or four generations beyond exposure. It can be difficult to know what exposure in the past contributed to an effect in your body now.

Beyond the trickiness of chemicals, there is a blindness built into our instruments and experiments. This is a second way of not knowing. To claim that instruments have built-in blindness is not necessarily a critique. It is true of all instruments. A telescope helps us see things at a great distance, but it does not help us to see something close and small. All instruments perceive some things and not others. Toxicology, the science that gives us so much of our knowledge about chemicals and their effects, has similarly been built on a particular way of seeing. The dose–response curve enshrines the notion that “the dose makes the poison.” It is toxicology’s job to figure out when a particular chemical arrives at the dose that produces harm.

THE MOUSE IN THE BOX

In the early 20th century, the dose–response curve was built into experiments for understanding the effects chemicals had on bodies. In the classic “mouse in a box” setup, you place a mouse in a chamber, an empty box devoid of variables. Then you introduce one chemical into that box, and increase its dose until you see a response in the mouse. To connect the dots between a specific chemical and a particular bodily response, you have to do the same thing with many mice, so that you can look for the level of a chemical that predictably induces a specific response. This is how scientists figured out the link between lead and lead poisoning. The recognition of this link between single chemicals and predictable responses was something that labour movements and occupational health researchers had to fight hard for. It underwrites some of our first environmental and occupational health legislation.

But this way of researching chemicals only detects some things. The world is not an empty box but a complex environment providing multiple exposures. Moreover, this kind of experiment is set up to look at predictable and regular responses that we can detect during a shorter duration of acute exposure. Maybe the mouse is exposed to a high dose for eight hours. That doesn’t tell you much about a lifetime of exposure at a low dose. Endocrine-disrupting chemicals often have their strongest effects at very low doses. They do not fit into the dose–response curve model, and the “mouse in a box” experiment is blind to what EDCs do to bodies. There has been a struggle over the last

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* This article is based on talk given at the public forum, “Is Your Body a Toxic Site? Reproductive Health as an Environmental Issue,” Toronto, May 15, 2015. The event brought together a scientist, a legal scholar, and a historian of science to discuss what we know and do not know about endocrine-disrupting chemicals.

BY MICHELLE MURPHY

Michelle Murphy is a professor of history and women and gender studies at the University of Toronto.

What roles do science and government policy play in cultivating our capacities to not know?

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25 years by scientists to legitimate their research into low-dose effects of endocrine disrupters. But it has been the mouse-in-a-box experiment that remains enshrined in our environmental standards.

With an explosion of research into EDCs, we now have more nuanced methods of connecting chemicals and effects. Yet industry lobbies are invested in keeping the way we regulate chemicals and effects confined to mouse-in-a-box detection. Indeed, such experiments are now used to deny low-dose responses, or responses that show themselves across generations, or responses from multiple chemicals. Industry lobbies have created a playbook cribbed from tobacco companies on the strategic production of not-knowing. Much industry-sponsored research into the effects of chemicals is designed to disconnect chemicals and effects.

PRODUCING UNCERTAINTY AND IGNORANCE

This is the third way of not-knowing: the strategic production of uncertainty and ignorance. The Canadian Environmental Protection Act of 1999 is a good illustration. When you hear that this Act does not categorize a chemical as toxic, you might think that the chemical is therefore safe. You might be wrong. For a chemical to qualify as toxic during risk assessment, it is looked at in two ways. First, analysts look at the weight of scientific evidence to see if studies suggest that a chemical produces harm in humans or animals. Second, they look at “exposure.” They ask whether Canadians are exposed to a chemical at a rate high enough to cause health problems. How do we know how much we are exposed to a chemical? Typically, we ask industry to report on their own activities. These industry-produced data are then subjected to a set of calculations. After estimating total emissions reported by industries, the assessment calculates the mean rate of exposure for all Canadians. Even if we know that a chemical has produced severe health effects, if the average rate of exposure for Canadians is lower than the safety standard, the chemical does not count as “toxic.”

The category “toxic” is not merely a measure of health effects, then; it is also a technical term of regulation. While some bodies and communities disproportionately experience exposures of a chemical with known health effects, that chemical may not qualify, legally, as a toxic chemical. In Canadian environmental legislation, “toxic” is a political term. There is a strategic not-knowing about what counts as toxic built into the legislation.

This leads me to the fourth way of not-knowing. In the last five years, we have seen an unprecedented destruction of our capacity for environmental science and assessment. The state has been destroying its own ability to collect data and respond to environmental questions. We can look at the omnibus Bill C-38 of 2012, some 450 pages long, which makes roughly 70 changes to different acts across many different agencies. At its core is a suite of changes to environmental legislation, from the Navigable Waters Act to the Environmental Assessment Act, either cancelling or cutting them or changing the mandate of the state’s ability to collect data and respond to environmental concerns. This is a historic shift in our ability to not-know.

In my own research about the environmental history of the Great Lakes and the St. Clair River, I have drawn on important studies at places like the Centre for Inland Waters in Burlington, Ontario. In the 1990s, scientists from the centre undertook internationally famous, ground-breaking research documenting the widespread effects of endocrine-disrupting chemicals on fish, reptiles, and birds in the Great Lakes. The Centre for Inland Waters is one of the many programs that is being dismantled. It has lost something like a third of its scientists, including senior scientists. You cannot find out about research at the centre because there is no website or publicly available knowledge. Even the union of federal scientists, the Professional Institute of the Public Service of Canada (PIPSC), has had a hard time finding out who has been fired at the centre. That is how obscured the activities of federal scientists have become in Canada.

THE STATE OF STATE SCIENCE

We, as a public, are becoming aware that our right to know about state science is weak. It is hard to find out about the research of federal scientists, not just science we want to happen, but also science we might want to critique. Think about the important revelations of secret experiments in residential schools. State science is not just our friend; sometimes it does pernicious things.

Reading this you might think, “OK, that’s state scientists.” There are still university scientists doing research and with their academic freedom they can study whatever they want. Unfortunately, it is not so rosy. The Canadian Association of University Teachers has gathered statistics showing that university-based research is also under threat. Across the three major federal funding agencies, 100 percent of new funding
requires an industry partnership. In the Natural Sciences and Engineering Research Council of Canada (NSERC), the major funding agency for science in Canada, there has been over a 1,000 percent increase in the funding of projects that are tied to the work of a specific company. In health research, there has been a 61 percent drop in successful grant applications. This is an unprecedented, historically significant, rearrangement of our ability to know about our bodies, our environments, and our communities.

In response, federal scientists are taking to the streets to protest the dismantling of our ability to know. They organized the 2012 Death of Evidence March, which took their protest to Ottawa, and this May, PIPSC, the union that represents professional scientists at the federal level, organized rallies of scientists across the nation in defense of scientific integrity.

We are in a strange and paradoxical moment. On the one hand, there is greater scientific consensus about the pervasive health impacts of endocrine disrupting chemicals. In the 2012 WHO and UN report, scientists conclude that endocrine-disrupting chemicals are a global problem and that states internationally should study and regulate them. Twenty years ago, when the dose-response curve dominated toxicological research, this report was unthinkable. Now, there is an explosion of research into EDCs. On the other hand, the Canadian government is intensifying strategies to produce ignorance about our environment. We know more, while our ability to do the research is being dismantled. Perhaps our upcoming election is a moment to dream of and demand a different way of regulating chemicals in Canada, a different way of asking the state to see us not only as Homo economicus but also as ecological beings.

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**The Cohen report** continued from page 22

**A NEW ERA OF ACCOUNTABILITY?**

As we have seen, this is a government that is not shy about appropriating the notion of public interest in serving the wants and desires of private interests. This is a government that seeks to systematically dismantle anything even remotely democratic on the one hand, while marketing itself as champions of democracy on the other. Seen in this way, it is hardly surprising that, as Cohen points out, the Harper government held “no consultations with First Nations or stakeholders about Bill C-38” (Cohen 2012, 82). More than undermining the public interest, Bill C-38 sounded the death knell for democratic accountability. Ironically, it was on this very issue that the Harper Conservatives, promising to usher in “a new era of accountability,” swept to power in 2006. With the reputation of the Liberal Party left in tatters by the sponsorship scandal, the Harper Conservatives positioned themselves as the “accountable” alternative to the entitled, “natural governing party.” None of this would have been possible, of course, had it not been for the investigation of the Gomery commission. It was Justice Gomery who revealed the “culture of entitlement” that existed within the Liberal Party, and it was Stephen Harper who rode the resulting wave of public outrage all the way to 24 Sussex Drive. And yet, as we have seen, this “new era of accountability” never materialized.

Indeed, whereas Gomery’s conception of accountability began with the need to address the increasing concentration of power in the Prime Minister’s Office, the Harper government accelerated this very process of centralization. By 2008, it became clear to Gomery that his proposals had fallen into a “black hole of indifferrence.” Is this a portent of things to come for Cohen? Or have his proposals, staledated as many of them have become, already suffered the same fate as Gomery’s recommendations? If, in fact, the Cohen report has already passed the event horizon, what have we lost? Many are quick to mourn the loss of $37 million in public funds, the final cost the Cohen commission. But these mourners are missing the point. More importantly, we have lost an invaluable store of evidence, sacrificed on the ideological altar of the Harper government. Are sockeye next?

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Obstruction of research, diminution of policy development, erosion of democracy

There are numerous examples of high-profile federal government researchers or appointed bureaucrats whose contracts were not renewed, or who quit or were terminated, when their findings or perspectives did not align with the conservative ideology of the Harper government. Less well known are the experiences of academic researchers whose research involves the participation of civil servants and the study of policy. In this article I share a couple of research experiences that involved civil servants who made concerted efforts to restrict access to interview participants in one case, and who made a defensive response to emerging research findings resulting in a complaint in the other. The purpose of this article is to expose some examples of how government attempts to curtail research at the expense of exploring, re-examining, and potentially creating new and possibly more effective policy. Such actions amount to an assault on democracy itself.

RESEARCH PROCESS OBSTRUCTED

A colleague and I undertook a two-part research study looking at the extent to which lesbian, gay, bisexual, transsexual, transgender, and queer (LGBTQ) people were recognized in health policy. One part of the study focused on federal policy, the other on provincial policy in Ontario. We undertook this work under the auspices of a larger national team study on the health and resiliency of LGBTQs (Mulé and Smith 2014). In addition to content analysis of existing federal health policy, we sought interviews with officials from Health Canada and the Public Health Agency of Canada (PHAC) who at that time held positions in departments and units with the potential to address policies related to LGBTQ health. We targeted key policy-makers at the intermediate and senior levels in five divisions within Health Canada, and approached nine policy-makers and one ministry official therein to participate in the study. Within PHAC, five policy-makers were approached within four divisions. Some were unavailable during the data collection time period. Others indicated no knowledge of LGBTQ populations and/or claimed that their work did not expose them to these communities. By deeming themselves as not useful for our purposes, they provided a clear indication of the absence of policy attention to our subject matter. Ultimately, we secured interviews from two Health Canada civil servants and one PHAC civil servant.

CONTROLLING THE AGENDA

Harper government’s strong centralized control over the management of information and the pending federal election of May 2011 may have dampened the response rate, for we were seeking interviews during the winter of that year. Our observations were confirmed, however, by two senior policy-makers we interviewed, each sharing insightful information regarding internal processes designed to restrict policy research by non-civil servant researchers. One of our respondents spoke of a climate of “risk aversion” in which the Harper government has actively discouraged civil servants from speaking to two specified sectors: the media and researchers. Now well known is the extent to which the Prime Minister’s Office (PMO) controls all media communications, even to the point of restricting federal government researchers from speaking directly to the media regarding their research results.

“Risk aversion” is but one of a number of strategies Harper is using to run a tight ship and maintain control of the conservative agenda. The civil servant remarked that it is the PMO’s view that media and researchers cannot be trusted to uphold ideologies of the Conservative Party, and present the possibility that attention may be taken off course. Rather than risk having to face difficult questions that call for reflection and introspection on the current work of the government, the strategy is to avert having to engage in such a process at all. I will return to the serious implications of such a strategy later in this article.

Another senior civil servant that participated provided me with a back story to the difficulties we had in trying to recruit research participants. He confided that a memo was circulated throughout Health Canada and the Public Health Agency of Canada regarding “Mr. Mulé’s research.” The memo incorrectly defined my research as studying LGBTQs within the civil service from a human resources perspective. It went on to inform me that human resources treats...
LGBTQ people as it would all employees, based on non-discrimination policies. Someone on a listserv exposed the inaccurate understanding of the focus of our study, clarifying that they believed my study was looking at how LGBTQs are taken up in federal health policy, if at all. The response came that those who participate are to remind Mr. Mulé that health services are provided to all Canadians equally as citizens of this country. When I inquired of this civil servant where the memo originated, the respondent said it came from the PMO.

When I learned of this memo (which of course could not be shared with me), the dots started to connect between this incident and what the previous participant shared regarding “risk aversion.” Apparently, once the PMO became aware of our research, it felt the need to circulate a memo, an act that on the surface was designed to direct people’s responses (in itself an intrusion on both the research and democratic process), but more covertly to discourage participation in the study. Even when the inaccurate understanding of the study was exposed, the same pattern was repeated, the same advice circulated regarding how to respond with a pat answer lacking any nuance or relevance to the question.

**STATE PROTECTIONISM OVER INTELLECTUAL INQUIRY**

While the research was in progress for the provincial aspect of this study, I presented a paper at a provincial LGBTQ health conference that summarized emerging findings in one session, and in another drew on the findings of a panel that had looked at how to balance HIV/AIDS with the broader health and well-being issues of LGBTQ populations. A junior policy-maker took offense to my emerging findings, complaining in her evaluation that they did not paint the Ontario Ministry of Health and Long-Term Care (OMHLTC) in a positive light. A senior civil servant verbally berated the second panel for undermining the work of those working in the field of HIV/AIDS, fearful that broadening the gaze on health issues beyond HIV/AIDS would dilute all the work done to date on HIV prevention.

The naiveté of the former and the overreactive protectionist response of the latter came to a head when they and others from the ministry called a special meeting with the host of the conference, a community agency funded by OMHLTC. They questioned the agency about how my abstracts were accepted and the credibility of my work. The agency tactfully responded that my abstracts represented the hard yet important questions being raised by my research, which was publicly funded, and that as a published scholar my work has been validated by peers. These civil servants were politely reminded that the conference is a venue to raise questions, discuss important issues, and, most importantly, learn from the experience. I learned of this discussion after the fact, as I had not been invited to the meeting.

**CONCLUSION: WHAT IS LOST?**

The common theme in these experiences is that the government is attempting to curtail and control knowledge that is being produced … and restricting intellectual development. This has disturbing implications for future policy making. Past and existing work, those most implicated (those affected by policy) have been absent. Mobilizing knowledge between sectors (that is, the state, academics, NGOs) provides a great opportunity for knowledge development and production with potential outcomes such as more relevant and impacting policy.

Instead, we find ourselves in a neoliberal climate in which we are federally governed by a highly controlling PMO that is ideologically driven to the point of diminishing the reach of science. From trying to feed potential research participants the responses they are expected to give, to more subtly discouraging their participation, the Harper government has created of an environment of “risk aversion” that seeps down to civil servants who shy away from research and its reflexive process due to myopic protectionism rather than consider the well-being of populations. Politically, this is an assault on democracy and a blow to efforts to improve society on any number of fronts. Knowledge production through research plays a key and invaluable contribution to democracy, one that must be grown and nourished, not shunted and dismissed.

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Stefano Tijerina: “The image of Canada as a benevolent, diplomatic, humanitarian and pacifist nation is now at risk”

BY LINA BEATRIZ PINTO GARCÍA

Lina Pinto-García is a Colombian PhD student in Science and Technology Studies at York University.

The Harper government is suspicious of all research that questions the goal of making Canada an energy superpower.

Since Stephen Harper arrived to power, Canada has become the site of practices that undermine the production and dissemination of scientific evidence that is not aligned with the economic objectives of the government (Tiki-Toki.com 2015). In particular, the Harper government is suspicious of all research that questions the goal of making Canada an energy superpower. Throughout the country, academic institutions have been shut down, research programs have been discontinued, and scientists working in federal government institutions have been dismissed. Likewise, the research budget has been significantly cut back, and restrictions have been applied to the dissemination of results through policies that seek to control the access of the media and the public to federal scientists (Cheadle 2010; Nature.com 2012). Many have seen these actions as violations of academic freedom and expression, which has led to the mobilization of scholars (Politics of Evidence 2015) and the circulation of vast amounts of related information through the press, the Internet (Dupuis 2014), radio (CBC Radio 2014), and television (The fifth estate 2014).

But to what extent are these practices exclusive to the Canadian context? And what has been the role of Canada in exporting them to other parts of the world? To address these questions, I interviewed Stefano Tijerina, professor at the University of Maine, who has done extensive research on the relationship between Canada and Colombia, primarily shaped by private sector interests and matters of political economy. In his forthcoming book entitled In Business We Trust: Canada and Colombia 1809–2002, which will be published by the University of Toronto Press, Tijerina shows that mining and oil, as in the late 19th century, are once again shaping the bilateral relation between Colombia and Canada. Throughout his research, Tijerina has become familiar with the strategies currently used by Canadian corporations in Colombia—companies registered on the Toronto Stock Exchange, such as the Vancouver-based Eco Oro projects, the Toronto-based corporation Gran Colombia Gold, and the company Anglo Gold Ashanti, which partnered with Vancouver-based B2Gold (Gutierrez 2015)—that involve the use of local military and paramilitary forces and other intimidation tactics as means to secure resources and displace local populations from strategic geographical areas (Tijerina 2014).

Lina Pinto: Since 2006, in front of different international audiences, Harper has referred to Canada as an energy superpower. What has this meant internationally?

Stefano Tijerina: Under Harper’s administration, Canada has been declared an energy superpower not only on a hemispheric level, but globally. The government has supported and given green lights to Canadian extractive companies to “conquer the world,” channeling revenues from businesses in Africa, South America, Central America, and Asia. In the US, the energy company Transcanada is leading the extractive agenda. There, Canadian industries have projects in the state of Maine, in the midwest, and in Alaska. Today, Canada is one of the top five suppliers of foreign investment to the Colombian economy; and today Canadian mining, oil, paper, and telecommunications companies control a large part of the Colombian economy. However, with the recent decline in oil prices in the international market, the interests of Canada in Colombia have begun to be reassessed, showing the utilitarian nature of this bilateral relationship. If the prices of gold and oil become insignificant, Colombia will become insignificant to Canada, leaving behind abandoned infrastructures, devastated ecosystems and ruined communities, without any kind of accountability. Canada is washing its hands of it, and leaving.

LP: In Canada, the government is said to be waging war against sci-
ence through the muzzling of scientists. On the streets, protest signs read “No science, no evidence, no truth, no democracy.” Why are people saying this?

ST: This is, in my view, the reality of an energy policy supported by an institutional, academic, and curricular agenda, where everything that does not align with the government’s project ends up being stigmatized as “non-science.” It is almost a copy of the neoliberal model developed by the United States, seeking to put an end to academic work that does not directly serve the economic and industrial development envisioned by Harper’s government. For example, the Association for Canadian Studies in the United States (ACCSUS), the main academic organization specializing in Canadian studies in the US, became a victim of Harper’s policy after making a critical analysis of Canada from the outside. Its budget was cut after 22 years of full support from the Canadian government, which forced the organization to reinvent itself in order to survive. In general terms, I think we can speak of a model that was generated in the United States and has been imported and adapted to Canadian interests.

LP: How is this reflected in other countries—for example, in Colombia, where there is a large presence of Canadian extractive industries?

ST: Recently, for example, the news reported (Caracol Radio 2015) that the Canadian government will start funding and working directly with the Colombian National Service of Learning (SENA) on generating a curriculum to train technicians for mining and other operations that Canadian companies are doing in Colombia. The SENA is only relevant to Canada as long as this institution contributes to advancing the Canadian agenda. In other words, Canada is working to develop the in-country human capital needed to exploit Colombia’s natural resources. There is also the case of the EAN University, which now has a direct link with the province of Que- bec to develop academic programs that support the economic and industrial interests of Canada in Colombia, mainly, mining and petroleum extraction (University of Quebec at Chicoutimi 2015). Another example is a periodical on bilateral relations between Canada and Colombia, Perspectivas Colombo Canadienses, published by the University of Rosario. This publication is sponsored by Harper’s government and seeks to support the mining activities of the binational agenda. All this has been emerging in the last 15 or 16 years, since people started talking about a free trade agreement between Colombia and Canada, which was signed in 2011. These examples show that there is a systemic, long-term policy to intervene in the Colombian system so that it meets Canadian needs and interests.

LP: At the international level, Canada is generally seen as a “benevolent” nation. Do you think this image is being questioned with the presence and the modus operandi of Canadian extractive industries in countries like Colombia?

ST: Yes, definitely. The idea of the “benevolent nation” based on which Canada became an economic power during the 20th century is at risk because its international policies increasingly resemble the imperialistic strategies of the United States. The image of Canada as a benevolent, diplomatic, humanitarian, and pacifist nation, which was built in the minds of academics, the media, and multilateral institutions, is now at risk. Today, in rural areas of Colombia, where people have become victims of forced displacement by Canadian companies, Canada is seen not as a benevolent nation but as a quite aggressive and violent one. I think Harper has not realized yet that his policy is putting in danger Canada’s reputation, which nourished Canada internationally for almost a century.

LP: In Colombia there is public concern about the negative impacts that extractive industries have on the environment and health. However, the troubled relationship between these economic activities and the production of knowledge is usually not taken into account. What can be done in the Colombian context to cope with the crisis of evidence?

ST: The best way to fill the gap between economic activity and knowledge production is to investigate and disseminate our findings widely. In Colombia, research funds to investigate these issues are scarce and, if funding is available, it only supports uncritical works that back extractive agendas. There should be more funding for academics to do research and write about the cultural, economic, environmental, social, and health consequences of extractive activities in Colombia. Another problem is that the NGOs that try to do this kind of work are often branded as anti-systemic or anti-state institutions.

LP: In Canada, the public is aware of the negative impacts that extractive industries have on the environment and health within the Canadian territory. However, little is said about the international impacts of Canadian industries around the globe. How should the concerns...
and mobilizations around evidence in Canada integrate an international dimension?

**ST:** As a first step, awareness has to be raised. If Canadians could be made more aware of Canadian international policy, people would mobilize more forcefully against the international strategies that are jeopardizing Canada’s “benevolent” nation image. Just as Americans are experts at hiding their imperialist agendas from their own people, restricting school education to domestic and local subjects, Canadians know very little about what Canadian industries do outside the country.

**NOTES**


1. In the Colombian context, this has a special connotation because of the 50-year-long armed conflict between the Colombian state and leftist guerrilla groups. Scholars and NGOs producing works that go against the interests of extractive industries – and other types of industrial projects affecting rural communities and the environment – are often stigmatized as partisans of guerrilla groups, even though they are unrelated.

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**THE POLITICS OF EVIDENCE**

Where science and technology intersect with social and environmental justice

[https://politicsofevidence.wordpress.com](https://politicsofevidence.wordpress.com)
WORKERS FOR LABOUR SHORTAGES

Temporary Foreign Worker Programs (TFWPs) have operated in Canada since the 1960s. Until 2006, such schemes operated without much public attention except for serious concerns about poor working conditions and unfair treatment by many employers. These programs were designed by the government to provide workers for limited periods when there was a labour shortage, which primarily meant jobs in the areas of seasonal agricultural work and child/eldercare work that would not attract national workers because of the working conditions (especially live-in requirements) and low pay. To make the decision that a labour shortage existed, government agencies used to conduct a labour market assessment of the rate of unemployment in a certain region for the particular type of work.

Public concern about these programs began to grow with the dramatic increase in the use of temporary foreign workers for a rapidly expanding list of low-skilled jobs, despite rising unemployment rates. When I started to research this issue, I found it difficult to find out how many of these workers were in Canada. The most recent Statistics Canada count was for 2012 with an estimate of 340,000. In 2013 there were 85,000 work permits reportedly issued and 50,000 for the first half of 2014, bringing the total to 475,000. If one adds another 50,000 for the latter part of 2014, the total is just over 525,000. However, there is reason to believe that the number of temporary foreign workers is actually going up, despite recent changes to the program designed to limit the number of new entrants in response to charges that the program was out of control and had moved too far from its original policy goal of filling temporary labour shortages. At the end of March 2014, it was reported that the number of low-skilled temporary workers continued to grow and was in fact 6 percent higher than the average for the first quarter in 2013 despite promise to cut back the program.

Since the 2011 expansion of the TFWP, most workers entering the country were issued work permits for four years, but they have to leave the country for four years before they can re-apply. These work permits expired on April 1, 2015. No one has any idea of how many temporary foreign workers left and how many stayed in the country, moving into the most precarious undocumented status. Note that most seasonal agricultural workers must return home to their country of origin for 4 months of a 12-month contract, and are not typically living in the country on December 1, when a key labour force survey is undertaken, which leaves them out of the count.

LACK OF DATA

As of May 2015, most research reports typically use data only up to 2012 and are essentially unhelpful for the formulation of up-to-date economic policy and planning. For example, a March 2015 report issued by the Parliamentary Budget Office (PBO), Temporary Foreign Workers in Canada: A Look at Regions and Occupational Skills, states:

The initial purpose of this report was to evaluate the impact of foreign workers on local labour markets for various occupations. There was particular interest in assessing whether there was a quantifiable need for foreign workers in low-skilled occupations arising from labour shortages. ... [T]he lack of disaggregated data on labour demand and labour supply at the regional and local level prevented us from achieving this original goal. [Emphasis added.] (PBO 2015, 4)

According to this report, there is no information about the critical issue of skill type or level for the about 45 percent of the total number of temporary foreign workers who entered Canada since the program was expanded. This makes it very difficult to assess whether appropriate resident/national workers are available before jobs are open to temporary foreign workers. Significantly, approximately 70 percent of the entrants came in under programs that do not require a labour market assessment—making the monitoring of labour shortages essentially impossible. Another issue that makes labour market policy...
development difficult is the fact that the federal government, which “routinely boasts that it has created more than one million jobs over the last seven years,” includes temporary foreign workers in their totals (Nuttall 2015). This practice could, as noted by Kendra Strauss, a professor of labour studies at Simon Fraser University, “provide a false picture of the labour market” (Nuttall 2015).

COUNTING PEOPLE

Every month, Statistics Canada surveys 54,000 households to collect employment data. First Nations reserves are not included in these surveys. It is no wonder that a non-Aboriginal cafeteria owner on the Ermineskin Cree Nation reserve in northern Alberta was given a permit to hire temporary foreign workers even though there is an estimated 70 percent unemployment rate on the reserve (Friesen and D’Aliesio 2014). The omission of First Nation peoples from what is referred to as a “quick, accurate and timely measure” of job market conditions “is largely due to the high costs of gathering data from remote areas” (Grant 2015). A similar response is given when Statistics Canada is asked why it cannot give an accurate estimate of the number of foreign temporary workers in the monthly survey: “these workers live in hotels and bunkhouses that would be difficult to reach for the survey” (Nuttall 2015).

In a Citizenship and Immigration (CIC) report on the role of migrant labour in Canada, Stan Kustec notes that to keep accurate data on the number of people entering Canada, the government must move from the system of counting the number of documents issued, a practice which can lead to “significant and sometimes substantial double counting” to a system based on the number of people and the length of authorization for each work permit (Kustec 2012, 19–20). This June 2012 report offers good advice, yet the data remain fragmented and unreliable in 2015. Recently, the Toronto Star (May 10, 2015) noted that there are now an estimated 340,000 people classified in “temporary,” non-permanent jobs in Toronto, many of which are part-time, but we have no idea how many of these are actually “temporary” workers with a limited work permit. How many may have “become” undocumented when approximately 70,000 work permits ran out on April 1, 2015? How can a country make good labour market policy when the data for this critical issue are so seriously dated and flawed?

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Compelling evidence: The Truth and Reconciliation Commission versus the Harper Conservatives

A LONG-AWAITED REPORT

On June 2, 2015, the Truth and Reconciliation Commission of Canada (TRC) released its long-awaited findings on Indian residential schools. In addition to a series of private ceremonies and public events, media coverage was extensive and highlighted the efforts of the TRC to expose the intergenerational trauma that Indigenous survivors and their families have experienced as a result of the residential school system. This was arguably one of the first times that Canadian media have acknowledged Indigenous issues and injustice with fervour and respect.

While the work of the TRC culminated in a few days of concentrated media attention, the years leading up to that point were complex and hard-fought. The three commissioners—the Honourable Justice Murray Sinclair, Dr. Marie Wilson, and Chief Wilson Littlechild—faced many challenges during their tenure on the TRC. Perhaps most notable was the multi-year battle by the TRC to access government records on residential schools. This was arguably one of the first times that Canadian media have acknowledged Indigenous issues and injustice with fervour and respect.

The three commissioners—the Honourable Justice Murray Sinclair, Dr. Marie Wilson, and Chief Wilson Littlechild—faced many challenges during their tenure on the TRC. Perhaps most notable was the multi-year battle by the TRC to access government records on residential schools. The Indian Residential Schools Settlement Agreement was finalized in 2006 and mandated the creation of the TRC. The settlement also laid out the TRC’s objectives, specifically an investigation into residential schools and recommendations for healing and reconciliation for survivors and their families. Further, the federal government and implicated churches were required to provide all “relevant documents in their possession or control” (Indian Residential Schools Settlement Agreement, Schedule N, s. 11) to the TRC. However, the TRC spent years trying to obtain this evidence from the federal government, putting at risk the TRC’s ability to fulfill its mandate. The result was a lawsuit, for which the TRC’s factum stated: “If the parties, through incompetence, delays or deliberate stonewalling (or a combination thereof) sabotage the work of the commission, then Canadians are certain to forget (and never fully learn) what has happened” (Canadian Press 2012). The primary purpose of the court action was to obtain clarification on the government’s obligations to provide evidence on residential schools, including what constituted “relevant” documents for disclosure.

GOVERNMENT RECALCITRANCE

The case highlights the years of struggle endured by the TRC to obtain required evidence from the Harper government. Affidavits filed in relation to the case showed that the federal government started to provide the requested evidence in April 2010, but only 38,000 documents were provided at that time. It was not until November 2011 that the government delivered most of one million documents, but that amount still constituted only a portion of the records necessary for the TRC to set up the National Centre for Truth and Reconciliation with a complete permanent archive. As of 2012, the TRC had not received the majority of the documents needed for the archive, and consequently filed a request for direction with the Ontario Superior Court of Justice (Perkel 2012). Indigenous communities also experienced the negative impacts of government recalcitrance: the Government of Canada’s resistance to the TRC’s mandate was contrary to the objectives of the settlement, the dignity of survivors and wider objectives of reconciliation (Niigaan 2013).

The 2013 Fontaine ruling, delivered by Justice Stephen Goudge, highlighted the mandate of the TRC as outlined in the Indian Residential Schools Settlement Agreement:

There is an emerging and compelling desire to put the events of the past behind us so that we can work towards a stronger and healthier future. The truth telling and reconciliation process as part of an overall holistic and comprehensive response to the Indian Residential School legacy is a sincere indication and acknowledgement of the injustices and harms experienced by Aboriginal people and the need for continued healing. This is a profound commitment to establishing new relationships embedded in mutual recognition and respect that will forge a brighter future. The truth of our common experiences will help set our spirits free and pave the way to reconciliation.

(Fontaine 2013, para. 17)

In this context of reconciliation, Justice Goudge maintained the significance of the TRC’s responsibilities to record and preserve the public history of IRS, and thus the TRC must have access to all relevant evidence as part of its “legacy mandate” (para. 22). Yet, in addition to preventing access to evidence on Indian residential schools, the federal govern-
“Suffice it to say that Canada’s obligation ... is to provide the documents in its possession or control that are reasonably required to assist the TRC to tell the story of the legacy of Indian residential schools” (para. 86).

One year later, a second judicial ruling at the Ontario Superior Court of Justice was delivered by Justice Paul Perrell in response to the TRC’s request to compel the Canadian government to produce relevant documents connected to a criminal investigation involving a residential school in Ontario. While some relevant documents were in the records of the Ontario Provincial Police, it is notable that the Government of Canada once again fought against the efforts of the TRC (Fontaine 2014). Rather than contribute to the arduous task of creating an accurate legacy to teach Canadians and the public about the atrocities of Indian residential schools, the Government of Canada once again stonewalled the TRC’s quest for evidence. Indeed, the ruling held that the government had failed in its obligations to provide relevant evidence to the TRC (CBC News 2014; Wawatay News 2013). Since then, survivors have been seeking full disclosure and compensation because the Canadian government only provided heavily redacted versions of the court-compelled documents (CBC News 2015).

During these court proceedings, the TRC lost money needed for its work and spent unnecessary time compelling the government to provide documents. While the government was not able to keep evidence hidden, some commentary indicated that the Harper Conservatives did not respond adequately to the TRC’s report and recommendations either (Kennedy 2015). Ultimately, these actions have been questionable at best and irresponsible at worst.

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This special publication of *Canada Watch* will be devoted to essays responding to the edited Confederation Papers.

In 1865, politicians in the United Canadas debated the prospect and terms of Confederation. The legislature published these debates, and an abridged version provides a readily accessible source of the political discussions. In these debates we can see some of the contemporary justifications and criticisms of the Confederation deal.

As we at York University look towards the 150th anniversary of Confederation, we believe that it is appropriate and useful to re-examine the debates and explore the logic, presuppositions and absences. The Canadas of 1865 were vastly different than the Canada of 2015, but the general constitutional framework adopted in 1867 still defines many of the parameters of political life today.

“From the vantage point of 2015, how can we use contemporary themes to revisit the Confederation debates of 1865?”