FORUM

ERICH VOGT

Academic Freedom in Canada, the Stephen Harper Government and the Canadian Media

Zusammenfassung

Felix Canada! Das Land verfügt nicht nur über gewaltige Naturschätze. Gut 35 Millionen Kanadier aus fast 200 Ländern geben dem Land ein gehöriges Maß an Vielfalt und Kreativität, die, aufbauend auf ausgezeichneten Bildungsangeboten, das Land zu einem 'natural' für die Informations- und Wissenswirtschaft im 21. Jahrhundert machen. Hinzu kommt, dass Kanada über ein umfassendes Netz an öffentlichen Institutionen verfügt, die Rechtssicherheit und Transparenz ebenso garantieren wie das Versammlungsrecht, freie Gewerkschaften, Meinungsfreiheit und eine freie Presse.

Die Sicherung dieser Errungenschaften kann jedoch nicht als gegeben vorausgesetzt werden. Die Regierung von Premierminister Stephen Harper ist seit Jahren ebenso unaufgeregt wie konsequent dabei, dem Land seine konservative Agenda überzustülpen. Dazu hat sie u.a. den in Staatsdiensten tätigen Umwelt- und Klimawissenschaftlern de facto Redeverbot auferlegt. Kanadas Medien, die Vierte Gewalt im Lande, haben es bisher versäumt, die Maulkorbpolitik der Harper-Regierung schonungslos offenzulegen. Die große Auseinandersetzung mit der Politik ist ihre Sache nicht. Wie können sich die Medien des Landes aus der Umklammerung der Politik lösen und wie sich dem kommerziellen Geschäftsmodell von Medienmogulen und Medienindustrie entziehen? Kanadas Medien täten gut daran, sich eine Unternehmensstruktur und -kultur zuzulegen, wie sie ihr gegenwärtig von den öffentlichen Universitäten des Landes vorgelebt wird.

Abstract

Canada is a fortunate country. The country has an abundance of priceless natural resources, a population rich in diversity and creativity, and public and private institutions that support the generation and free exchange of knowledge and information. If properly cultivated, all of them will thrive and ensure that the country's best days are still ahead. That however is not a given. Canada's scientists are under siege. The Harper government demonstrates a curious proclivity of gagging and muzzling its scientists. In

particular climate and environmental scientists have come under special scrutiny by the Prime Minister's Office. It makes sure that whatever scientific finding is shared with the public, particularly those in the critical climate change field, has the imprimatur and 'blessings' of the government. This approach to communicating public policy should put Canada's media, the 'Fourth Estate', in high alert mode. That has not happened. Its reporting has been incoherent and meaningless. Clearly, the country's media needs to be brought up to speed, and its universities may just be the place to turn to bring it into the knowledge age. There is no better place than at universities to hone intellectual rigor, freedom of thought and expression, independence of mind and perspectives, and cultivate communication skills designed to connect to a larger public and impart knowledge.

Résumé

Le Canada est un pays heureux. Il possède une abondance de ressources naturelles précieuses, une population diversifiée et créative ainsi que des institutions publiques et privées qui soutiennent la production et l'échange libre de connaissances et d'information. Cultivées adéquatement, ces richesses se maintiendront, promettant un avenir encore meilleur pour le pays. Or, un tel avenir n'est pas garanti. Les chercheurs du Canada sont en état de siège. Le gouvernement Harper est curieusement enclin à bâillonner ses chercheurs. Les chercheurs en climatologie et en sciences environnementales ont l'attention particulière de l'Office du Premier Ministre. Pour avoir l'autorisation de partager leurs conclusions avec le public général, les chercheur(e)s – notamment ceux et celles qui travaillent sur les changements climatiques – ont besoin de l'imprimatur et donc de l'approbation du gouvernement. Cette façon de communiquer les politiques publiques devrait normalement alarmer les médias, le "quatrième pouvoir". Or, cela ne s'est pas passé au Canada. Les reportages portant sur ces sujets-là ont plutôt été incohérents et dénués de sens. Il est donc évident que la capacité des médias du pays doit être améliorée, et les universités peuvent sans doute les aider à maîtriser les défis de l'époque de l'information. Il n'y a pas d'endroit meilleur que les universités pour enseigner la riqueur intellectuelle, la pensée libre et la liberté d'expression, et pour cultiver les talents de communication dont les journalistes ont besoin pour atteindre le public général et lui transmettre des connaissances.

Canada is a fortunate country. Among its many assets, three stand out. The country has an abundance of priceless natural resources, a population rich in diversity and creativity, and public and private institutions that support the generation and free exchange of knowledge and information. All of them, if properly cultivated and protected, will thrive and do their part to ensure that the country's best days are still

ahead. That however is not a given. Fierce competition, often for short term political and economic gain, make treading lightly on Canada's natural, human and intellectual capital a challenge. A wave of attacks on the country's scientists by the very institution that is supposed to protect them, demonstrates how difficult it is to properly harness your assets.

Looking at it from the outside, the Harper government's attempts to choke off the oxygen of its scientists boggles the mind. The country has invested into quality higher education, encouraged the study and teaching of the sciences, embraced intellectual diversity, promoted research and innovation, and ensured academic freedom. Canada's pre-eminent position in the world has to a large degree been a direct result of its ability to produce world class scientists in both the natural and social sciences.

That contribution is under siege today. The government is showing a curious proclivity of censoring Canadian scientists in its employ particularly where the findings of science might be at odds with the government's political and commercial objectives. Whether this form of muzzling will spread to the country's universities and research institutions is anyone's guess. The danger is that once the state makes it its duty to curtail freedoms – often by insinuating that national security interests are at stake – it is exceedingly difficult to rein it in again. ²

Barring the federal scientist David Tarasick from disseminating his latest Arctic ozone hole findings and preventing his colleague Kristi Miller from sharing her research about a virus that might be killing British Columbia's wild sockeye salmon, should raise the alarm levels in Canada's higher learning environment.³

American scientists who for years have collaborated with their Canadian colleagues on joint environmental research projects have also complained about the Harper government's restrictive guidelines on sharing their findings publicly.⁴ Andreas Muenchow, a physical oceanographer at the University of Delaware, feels that the present government's conduct threatens his academic freedom and ability to

See "Harper-controlled DFO is censoring federal scientists with research rules, critics say", in: http://www.timescolonist.com/news/local/harper-controlled-dfo-is-censoring-federalscientists-with-research-rules-critics-say-1.75280#sthash.lkrKzssh.dpuf; see also an overview of the Harper government's interference with science communication in: http://www.climatesciencewatch.org/2013/03/20/new-report-on-interference-with-sciencecommunication-in-canada/

² See http://democracywatch.ca/wp-content/uploads/OpenGovReportJan2113.pdf. The 128-page University of Victory report, prepared at the behest of the Ottawa-based Democracy Watch, for the basis of a February 2013 complaint to federal Information Commissioner Suzanne Legault, charging that the government is systematically obstructing the rights of federal scientists, the media and the Canadian public to timely access scientific departments.

^{3 &}quot;When science goes silent", by Jonathan Gatehouse, 3 May 2013, in MacLean's; see http://www2.macleans.ca/2013/05/03/when-science-goes-silent/

^{4 &}quot;Canadian federal research deal 'potentially muzzles' U.S. scientists" in CBC News 15 February 2013; see http://www.cbc.ca/news/technology/canadian-federal-research-deal-potentially-muzzles-u-s-scientists-1.1322018

publish data and analyses on scientific issues of general interest without government interference. "I cannot in good conscience sign away my freedom to speak, publish, educate, learn, and share both of what I know and what I do not know", Muenchow insists.5

By themselves these incidents might be seen as isolated cases where bureaucrats in their efforts to please their political bosses have accidentally overreached. And while some are in fact outright comical excesses in communication control - for instance when a federal scientist was barred from talking to the media about his work on a flood 13 000 years ago without approval from his designated minister, or when a researcher was ordered not to attend the launch of his own novel because it dealt with climate change -, a steadily growing number of federal scientists complain about being stopped from freely discussing their research findings with the media, even if they have critical repercussions for the health and safety of Canadians, or their environment.

Environment Canada appears to be the Harper government's chosen pilot for establishing stricter quidelines for the sharing of information with the public. Whether it's about new scientific insights into climate change or about national energy policy implications for climate change, Harper and his lieutenants have put in place protocols and procedures designed to ensure that Environment Canada stays on message.⁶ This they do by withholding the full scope of their scientists' findings. The award-winning senior science writer Margaret Munro says "it's pretty clear that for federal scientists, Ottawa decides now if the researchers can talk, what they can talk about and when they can say it".7 They are not allowed to speak to reporters without the consent of media relations officers, so increasingly journalists have simply given up trying to access federal scientists, a response the Harper government probably welcomes.

Lessons from the US

What this obsession to control the flow of information and "the message" can lead to was made painfully clear during the Bush II presidency. Political appointees at both the Environment Protection Agency and the Council on Environmental Quality routinely edited scientific reports and deleted any and all references to climate

CBCNews, Technology & Science, 15. February 2013, "Canadian federal research deal 'potentially muzzles' U.S. scientists"; see http://www.cbc.ca/news/technology/canadian-federal-research-dealpotentially-muzzles-u-s-scientists-1.1322018?goback=.gde_2196290_member_214806168; see Andreas Muenchow's Blog of 7 February 2013 entitled "Academic Freedom and International Collaborations" in: icyseas.org

⁶ The Economist also chimed in and critically reviewed the Harper government's ultra-tight control of communications; see http://www.economist.com/blogs/americasview/2013/03/scientific-freedom-canada

[&]quot;Canadian Scientists Told By Ottawa Which Findings Make Press, Panel Tells Global Research Community" in: http://www.theglobeandmail.com/news/politics/ottawa-muzzling-scientistspanel-tells-global-research-community/article4092468/

change and human-induced ("anthropogenic") carbon dioxide spikes in the atmosphere. Bush administration efforts to overturn by political force the laws of chemistry and physics came to a screeching halt only when a whistleblower copied the heavily edited documents and sent them to the *New York Times*.⁸

Efforts to discredit climate science continued unabated however. Fueled by a corporate climate change denial machine, conservative (Republican) politicians and office holders went after climate scientists. The most controversial case involved the then Attorney General of the State of Virginia, Ken Cuccinelli. He went after the celebrated "hockey stick" climatologist Thomas Mann, then assistant professor at the University of Virginia, under the pretext that the scientist had violated fraud laws in relation to a number of research grants. Mann, according to Cuccinelli, misused the grants to manipulate scientific data to produce findings in support of regulating carbon dioxide. Cuccinelli wanted the university to hand over to him documents and emails from, to or relating to Mann's correspondence with nearly 40 climate scientists, research assistants and administrative staff. He also wanted access to all computer algorithms, programs and source codes created or edited by Mann and stored by the university. No evidence of wrongdoing was presented to support the claim.9

This brazen assault on the academic freedom of inquiry prompted an outcry in the academic community. The American Association for the Advancement of Science demanded that no scientist be subjected to fraud investigations simply for providing scientific results that may be controversial or inconvenient and charged that investigations such as those Cuccinelli initiated against Mann could have long-lasting and chilling effects on a broad spectrum of research fields critical to a range of national interests from public health to national security to the environment. The journal Nature chimed in with an editorial that characterized the investigation as an "ideologically motivated inquisition designed to harass and intimidate climate scientists".

While this attack on scientific inquiry was beaten back by Virginia's Supreme Court, new attempts to question the legitimacy and solidity of climate science and means of winning over the public are underway. The American Legislative Exchange Council, a corporate lobbying group funded, among others, by the fossil fuel indus-

⁸ The 'whistleblower' was Rick Piltz who held senior positions in the Coordination Office of the U.S. Global Change Research Program. In the spring of 2005, Piltz resigned from his position to protest the Bush Administration's political interference with climate change communication. His whistleblower documentation of politically motivated White House editing and censorship of climate science program reports intended for the public and Congress received front-page coverage in the *New York Times* and was widely reported in the media. Piltz testified before both the House of Representatives and the Senate at hearings on political interference with federal climate scientists: see

http://query.nytimes.com/gst/fullpage.html?res=9E0DE1D71338F93BA35755C0A9639C8B63
For a detailed account of the incident see "Attorney General of Virginia's climate science investigation" in: http://en.wikipedia.org/wiki/Attorney_General_of_Virginia%27s_climate_science_investigation

try, is presently pushing "model bills" mandating the teaching of climate change denial in public school systems. Bills to this effect - which routinely come under such innocuous headings as 'the Environmental Literacy Improvement Act' - have been rolled out in the state legislatures of Oklahoma, Colorado, and Arizona.¹⁰

Yet, climate change is merely the message, the proxy. The core effort to control the message and the medium has very little to do with the topic. What this fight is really about when stripped to its core is the preservation of our present way of life, whether American or Canadian, and, by extension to secure the continued operation of the free-market economy. For our present way of life to continue, the illusion of endless abundance must be maintained. To indicate otherwise is to undercut the raison d'être of our economic system – and to commit political suicide. No government or corporate entity can be expected to do so.¹¹

The media's responsibility

But no less must be expected of the country's media. It is the responsibility of the 'Fourth Estate' to look closer at the real meaning of government and corporate pronouncements, policies and programs, and to provide the public with insights into who stands to benefit and lose from these actions. It is not enough to merely transport information, which is nothing more than a collection of statements about facts devoid of meaning and context. The media's real contribution to the public is to make sense of the flood of information it transports, giving it coherence and meaning.

Or to say it more poetically with the words of the American poet Edna St. Vincent Millay:

Upon this gifted age, in its dark hour Rains from sky a meteoric shower Of facts ... they lie unquestioned, uncombed. Wisdom enough to leech us of our ill Is daily spun, but there exists no loom To weave it into fabric.

In saying that we have no loom to weave information into fabric, of making sense of an abundance of facts (i.e. information), the poet implies that while there is an abundance of information, there is a shortage of knowledge - knowledge in the form of organized information; information that is embedded in some context; information that has a point of view, that leads one to seek further information in

^{10 &}quot;Three States Pushing ALEC Bill to Require Teaching Climate Change Denial in Schools", see http://www.desmogblog.com/2013/01/31/three-states-pushing-alec-bill-climate-changedenial-schools

¹¹ For a thorough treatment of US Climate Change policy and politics see "Current State of Climate Politics" by Erich Vogt in: Environmental Policy and Law, 42/3, 2012, pp. 188–198.

order to understand something about the world. Without organized information, the public may know something of the world, but very little about it. And it is only when the public has knowledge, can it make sense of information and how it matters or relates to people's lives.¹²

For all intents and purposes, Canada's media is still in the information business rather than the knowledge business. Had it discharged of its public mandate and responsibility more effectively, its readers, listeners and viewers would have realized that, for instance, every paper and analysis on climate change produced by either the Harper government or the extractive industries had neither the intention nor the interest to prove the evolving climate change science wrong; their ultimate objective was to make opposition to climate change a belief system – as central to Canadian core values as freedom of expression and the practice of religion; to preserve the Canadian way of life; to ensure that the engines of the capitalist market economy could continue to produce and to consume; and to carry forward the illusion of endless abundance.

As of this writing, the Harper government appears to have succeeded in both dissuading the media from taking a more systematic look at environmental issues and discouraging it from meaningfully covering pertinent environmental issues, much less making any sense of the information. According to internal government documents obtained by Canada's Climate Change Network, the attention the media paid to federal climate change research dropped by 80 percent in response to the tightening access rules to government scientists by the Harper government. And what is eventually reported is largely useless because it is incoherent, confusing, and without context.

Lest we need reminding: the media is a public trust, its owners have a special responsibility to ensure the public has access to and a comprehensive understanding of the pros and cons of policies and policy options to make intelligent choices affecting families, communities, the country, and the world. And while Canada's media owners are always ready to pay lip service to their public trust mandate, their actions speak to a very different beat.

According to the country's economic historian and media theorist, Harold Innis, the major objective of those controlling the media system is to promote consumption and hedonism.¹⁴ The business plans and balance sheets of the country's major newspapers, for instance, tell us why this is so. Roughly 80 percent of newspaper revenues derive from advertising and only 20 percent from single copy sales and subscriptions. Given those realities, media owners ensure that their papers' content

¹² See also Neil Postman's presentation "Information, Knowledge, Wisdom" to the Sixth International Broadcast News Workshop at the Canadian Broadcasting Corporation in Toronto on 27 May 1998.

^{13 &}quot;When science goes silent", by Jonathan Gatehouse, 3 May 2013, in MacLean's; see http://www2.macleans.ca/2013/05/03/when-science-goes-silent/

¹⁴ Harold Innis, A Plea for Time, University of New Brunswick, 1950, p. 79.

is consistent with the free market economy's philosophy and consumption ethic. Content, in other words, is not to detract from, but is to contribute to, the effectiveness of the surrounding ads. A look at the media coverage of relevant climate change concerns – like the Kyoto Protocol, the Copenhagen Climate Change Conference, and the Keystone XL pipeline – by some of Canada's most prominent media outlets clearly document this calamity.

The media's understanding of climate change

Coverage of the Kyoto Protocol by the National Post and Globe & Mail¹⁵ during the heights of the ratification debate, for example, rarely rose above doing the bidding of key business and fossil fuel interests. In both papers, the reasons for opposing the Protocol were lifted right from their play book: that the Protocol has not proven that global warming is human-induced, that it would be divisive and unfair to energy-rich regions, too costly, cause dis-investment and unemployment, disadvantage Canada vis-à-vis the United States (where the Senate had made clear it would not ratify the Kyoto Protocol), and force the country to buy carbon emission rights abroad. Negative news reports and commentaries outnumbered positive ones by 2:1.16

Both papers could not camouflage their support for the extractive industries. In response to former Prime Minster Chretien's decision to ask Parliament to approve ratification of the Protocol, they all but adopted the position of Canada's petroleum producers - apparently without checking the veracity of comments made. A particularly revealing incident was the National Post's handling of an article authored by the former chairman and CEO of Imperial Oil, Tim Hearns, entitled "Canada's Missing Governance on Kyoto". The author stated that if Canada ratified the Kyoto Protocol, it will be "the only nation in the Western Hemisphere to be constrained by Kyoto"17. Hearns was either unaware of or simply ignored that all of Western Europe would also be constrained by the Protocol. While the author may be forgiven for this wrongful statement, the Global & Mail should have done its fact checking before lifting this erroneous comment directly from the pages of the National Post and incorporating it in its editorial entitled "The Terms of Canada's Participation in Kyoto".

An analysis of both papers' coverage of the Kyoto Protocol makes clear that neither was interested in giving their readers an appreciation of its impact on climate change and on the capacity of the planet to sustain life. The environmental aspects of the Protocol were of little to no interest to either. There was no attempt to explain

¹⁵ For a detailed analysis of the papers' coverage of environmental issues see "Newspaper Discourses on Environment by Robert E. Babe in:

http://web4.uwindsor.ca/users/w/winter/Winters.nsf/0/b98c7c39d61ad93485257068006c4501/ \$FILE/babe.environ.klaehn.pdf

¹⁶ Robert E. Babe, p. 23.

¹⁷ See "Newspaper Discourses on Environment", Robert E. Babe, p. 16.

the range of harms (costs) from global warming, nor the environmental consequences, such as severe weather pattern changes including droughts, floods, and storms, rising sea levels, critical loss of biodiversity, health effects, associated with it. Both national papers treated it primarily as a political/economic/business/financial story; it looked at what the Protocol would mean for employment, profits, investments, balance of trade, and other economic and financial indicators. The environmental consequences of greenhouse gas emissions and the Protocol's impact on reducing them were mere background, often implied, to the political or economic/financial thrust of the stories and commentaries.

According to Robert Babe's survey "Newspaper Discourses on Environment", the Globe & Mail's Kyoto Protocol coverage, for example, was led by its political reporter Steven Chase who authored or co-authored 42 articles, and its business reporter Patrick Brethour who wrote 18 articles. The paper's Earth Science Reporter Alanna Mitchell – named in 2000 by the International Union for Conservation of Nature and Natural Resources and the Reuters Foundation as the best environmental reporter in the world – was barely evident in its Protocol's coverage. She all but authored 10 articles related to Kyoto and climate change; five during the prime minister's ratification announcement and five during the next 13 weeks. And Martin Mittelstaedt, the paper's Environment Reporter, fared even worse; he authored all but one article on Kyoto during the same period. 18

Climate change deniers were given inordinate space to make their case while the activities of NGOs and environmental groups noticeably barely made it onto the papers' pages. There was also a distinct pattern of belittling the concerns of citizens while being very deferential to those of the country's business community.

The same pattern was followed when the Harper government pulled out of the Kyoto Protocol. The rhetorical fireworks set off by Prime Minister Harper and his then Environment Minister Peter Kent in the wake of the decision to withdraw were given extensive coverage in the national press. The reader was reminded of Harper's disdain for the Protocol which he at times referred to as a "socialist scheme" designed to siphon money out of rich countries and one that is "based on tentative and contradictory scientific evidence" 19. Kent routinely called it "radical and irresponsible" and claimed that "to meet the target [by] 2012 would be the equivalent of either removing every car, truck, ATV, tractor, ambulance, police car and vehicle of every kind from Canadian roads, or closing down the entire farming and agricultural sector and cutting heat to every home, office, hospital, factory and building in Canada" 20. The National Post, Toronto Star, and Globe & Mail, for example, all gave the

^{18 &}quot;Newspaper Discourses on Environment", Robert E. Babe, p. 37.

¹⁹ See CBCNews in http://www.cbc.ca/news/canada/harper-s-letter-dismisses-kyoto-as-socialist-scheme-1.693166

²⁰ Kyoto withdrawal statement by then Environment minister Peter Kent in: http://www.ec.gc.ca/default.asp?lang=En&n=FFE36B6D-1&news=6B04014B-54FC-4739-B22C-F9CD9A840800; see also report in thestar.com

decision very sympathetic news coverage. Climate change considerations played no role in the coverage; it was all about "the realities of Canada's still recovering economy, job creation and job growth".

And for the opposition to the government's decision it was, once again, déjà vu. Its positions were kept to short news clips which were buried in the back of the papers' news coverage.

Did coverage of high visibility climate change events and concerns fare better in the country's regional papers? The short answer is, not really. Simon Fraser University's Shane Gunster in her landmark study on "Covering Copenhagen: Climate Change in BC Media"21 provides profound insights into the driving forces of the province's major papers' approach to both the news and editorial treatment of the Copenhagen Climate Change Summit. Both the Vancouver Sun and The Province featured skeptical news columns and views on climate change with such attention getting titles as "Put Science of global warming on trial" and "The scare tacticians: 'Scientists' should face criminal prosecution" – directly challenging the views of 99% of the world's climate scientists. Gunster comes to the singular conclusion that articles addressing the causes and consequences of climate change were much less common than those that looked into its political dimensions. Less than 18 percent of climate change articles had the science as their primary focus, as compared to 73 percent that looked at the politics of climate change.²² And those stories that looked at the science were not domestically produced; they were generated and originally disseminated by international news agencies and organizations, such as Reuters, NBC, BBC, or Agence-France Press. They thus lacked much needed local or regional focus, context and significance. Papers' views of the country's present dependence upon its carbon-intensive extractive industries for revenue and employment provided their points of reference in both news columns and opinion pieces when rationalizing the country's and regions' failure to commit to credible and binding climate change policies and targets. In general, the extractive industries are seen as quintessential to people's wellbeing and, by extension, are in Canada's best national interest - they are thus beyond political debate and action. The likes of Keystone XL are non-negotiable realities climate change politics simply has to accept and accommodate. Systematic and systemic coverage about the other reality that, for example, the exploitation of Alberta's tar sands would bring the planet ever closer to an irreversible greenhouse gas tipping point - have therefore been consistently absent.

http://www.thestar.com/news/canada/2011/12/12/canada_first_nation_to_withdraw_from_ky oto_protocol.html

²¹ The full report can be accessed at: www.cjc-online.ca/index.php/journal/article/ download/2367/2258

²² Shane Gunster, "Covering Copenhagen: Climate change in BC Media, p. 483.

"The lefty worrywart"

The Balsillie School of International Affairs' scholar Thomas Homer-Dixon clearly upset the National Post with a piece he wrote for the *New York Times* about the Keystone XL pipeline.²³ In his retort, the paper's columnist Peter Foster did not take issue with the substance of Homer-Dixon's critical article but chose, instead, to question and attack him personally and question his professional credibility and affiliation – "the lefty academic worrywart" ... "peddling global governance at the Balsillie School" –, and then accused him of pushing "the theory of socialism" and "embracing a range of related lousy ideas, from zero-growth societies to the desperate last-ditch defense of peak oil theory".

Media coverage of course is more than the simple collection of news articles and opinion pieces produced by journalists, editors and columnists; it is, rather, a reflection of socio-political and economic factors that have given rise to its present day norms and values. Media coverage also reflects the industry's consolidation and changing ownership structures.

Media scholar R.W. McChesney takes a very hard-nosed view of today's media when he writes that the core structural factors that influence the nature of media content include the overall pursuit of profit, the size of the firm, the amount of direct and indirect competition facing the firm and the nature of that competition, the degree of horizontal and vertical integration, the influence of advertising, the specific interests of media owners and managers, and, to a lesser extent, media employees.²⁴ In combination, these factors can go a long way in providing a frame for understanding the nature of media content.

Media owners' financial interests and political orientation not only influence newspaper editorials but straight news reporting as well, and economic considerations considerably impact papers' coverage range and depth. No paper, not even the world's most reputed media organizations, are immune to adverse economic pressures and making painful news beat and staff cuts.

No matter how 'the beats' are institutionally organized, the professional canon of journalistic fairness requires reporters to present competing views. When the issue is of a political or social nature, fairness – that is presenting the most compelling arguments of both sides with equal weight – is a fundamental check on biased reporting. But this canon causes problems when applied to issues of science. As Ross Gelbspan, longtime environmental reporter for the Boston Globe, comments in his book *The Heat is on, "*it seems to demand that journalists present competing

^{23 &}quot;The Tar Sands Disaster", New York Times, op-ed contribution, 31 March 2013; see http://www.nytimes.com/2013/04/01/opinion/the-tar-sands-disaster.html

²⁴ R.W. McChesney, Rich Media, Poor Democracy: Communication Politics in Dubious Times. University of Illinois Press, 1999.

points of view on a scientific question as though they had equal scientific weight, when actually they do not".25

The science on climate change in fact is clear. One key study examined every article on climate change published in peer-reviewed scientific journals over a 10-year period. Of the 928 articles on climate change the authors found that not one of them disagreed with the consensus position that climate change is happening and that it is human-induced.²⁶

But the quest for objectivity and balance led papers such as the New York Times, Washington Post, Los Angeles Times, and Wall Street Journal to totally skew scientific reality in its reporting, as an analysis by the David Suzuki Foundation found.²⁷ From a total of over 3.500 articles on "global warming", the Foundation examined a random sample of over 600 articles. The analysis brought to light that the majority of these stories reflected the journalistic norm of "balanced reporting", giving the impression that the scientific community was embroiled in a "rip-roaring debate" on whether human beings contributed to global warming. Fifty-three percent of the articles gave roughly equal attention to the views that humans contribute to global warming and that climate change is exclusively the result of natural fluctuations. This representation through the pursuit of the norm of balance systematically and significantly proliferated an informational bias (in favor of a fringe of climate change deniers) and thus diverged from the consensus of the United Nations Inter-Governmental Panel on Climate Changes, which found that humans have been the main driver of climate change since the onset of the industrial revolution.

As Canada's economy struggles and media organizations 'streamline' their operations primarily with lay-offs, closing desks and cutting quintessential capacity building investments, Alanna Mitchell, the Globe & Mail's highly regarded Earth Science reporter, eventually left the paper and found ready refuge at Oxford University's Reuters Institute for the Study of Journalism²⁸ where the productive engagement between scholars from a wide range of disciplines and practitioners of journalism is encouraged. Other academic institutions, like Harvard University, Stanford University, and the University of Michigan also welcomed journalists like Mitchell for one year stints to recalibrate and regenerate their batteries in an environment eager to

²⁵ Ross Gelbspan, The Heat Is On: The Climate Crisis, The Cover-up, The Prescription, Perseus

²⁶ See the 'Climate change deniers' review and analysis done by the David Suzuki Foundation in: http://www.davidsuzuki.org/issues/climate-change/science/climate-change-basics/climatechange-deniers/

²⁷ See also "Journalistic Balance as Global Warming Bias Creating controversy where science finds consensus" by Jules Boykoff and Maxwell Boykoff in: http://fair.org/extra-onlinearticles/Journalistic-Balance-as-Global-Warming-Bias/

²⁸ The Institute was established in 2006 and is based at the Department of Politics and International Relations at the University of Oxford. The Thompson Reuters Foundation has supported the program of visiting fellowships for journalists from around the world based at what is now Green Templeton College.

bring depth and rigor of academic scholarship to major issues of relevance, like climate change, to the world of practice of the media.

There is nothing inherently inconsistent about good journalism being taught by and being practiced in private sector media organizations operating in a market economy, but the public is clearly not exhorting corporate media owners to turn Canada's media around. It clearly has noticed that the media industry has for some time now been in a near constant state of upheaval. Mirroring the adaptive strategies of other captains of commerce and industry, media owners and operators have initiated their share of sales of entire media chains and media mergers to make their industry fit for a rapidly changing media landscape. And while history will be the judge of the wisdom of those operations, the revelation of widespread criminal editorial and business practices by prominent media owners and operators have put in doubt the wisdom of putting them in charge of a public trust.

Best suited to ensure its political independence and ability to address and respond to both the profession's and public's needs and demands are the country's universities. They could do for the media profession what they have already done for the professions of medicine and engineering, for example. Engineering schools have long served the country's infrastructure and national security needs. And while they continue to do so today, they are also taking a more value and applications-oriented focus on economic growth and environmental preservation and, in the process, experiment with alternate modes of teaching and learning.

There is no reason why the country's universities cannot devote their considerable intellectual resources and energies to also conceive and develop appropriate curricula for practicing journalists and journalism students by increasing their research capacities, and by fulfilling their role of serving the public good in ways that universities can beyond teaching and research. There is no better place than at universities to hone intellectual rigor, freedom of thought and expression, independence of mind and perspectives, and cultivate communication skills designed to connect to a larger public and impart knowledge.

Some of the country's universities have already begun to test fresh approaches to the teaching of journalism. They have acknowledged that the new generation of journalists needs to understand complex subjects in all their breadth and depths. And while achieving complete knowledge of every subject is impossible, the goal should be to develop, among others and in addition, an appreciation for the importance and continued relevance of history, religion, political theory, and philosophy that goes beyond western culture; a functional knowledge of the basic concepts of economics, business and the forces of globalization, and some basic knowledge of the life sciences. Journalism students in particular must also acquire and master the foundational skills of the craft of writing and reporting; the skills of analyzing and organizing information; the ability to deal with new situations as knowledge and working conditions shift over time; and attain the moral and ethical standards that guide professional behavior.

All this, of course, pre-supposes that the country's universities maintain their academic freedom of inquiry and expression without fear of reprisal and censorship; that they continue to be Canada's nearest thing to a "hotbed of insurrection". Let's assume the University of Toronto under the leadership of the Munk School of Global Affairs and the School of the Environment are in the process of jointly organizing a science and policy conference on Alberta's tar sands and its impact on climate change. Let's further assume the government gets wind of this and asks the responsible university officials to reconsider their decision and cancel the event; not forgetting to hint that critical funding for a number of university projects might not be forthcoming if the university chose to go ahead? Would the university be prepared to push back? Would it feel strong enough to take up the challenge by itself? Where would it turn to make a broadly-based and persuasive case in the public?²⁹

Clearly, a vibrant media would be an indispensable platform for what would surely be(come) a vigorous exchange of views and opinion on whether such an intervention can rightly be considered a curtailment of academic freedom. A vibrant media could also moderate the debate and provide through vigorous research and analysis the public with much needed insights into the meaning of it all – and the consequences for society. But it can only provide such an essential public service if it is equipped with the right tools and skills and if it has the resources to push back forcefully and convincingly against powerful interventions.

The present private sector led business model is not able to give the media the space and heft to push back. However, publically governed, financed and managed papers – much like the publically governed, funded and managed electronic public service media - housed within the confines of public universities would be a credible alternative and convincing complement to today's private sector press. That the press in contrast to media organizations like the CBC and BBC, or Germany's ARD and ZDF, has to be governed and owned by corporate interests, either in the form of media moguls like Rupert Murdoch or David Black, or by faceless multinational media corporations, is not a conditio sine qua non. The more open the intellectual and political horizon of the operators and reporters, and the greater the competition between and among multiple forms of media organizations, the better the public is served.

A media industry inculcated with the academic freedom of scientists and structurally anchored within a system of devolved and diluted power can more easily withstand crude power grabs by political powers and corporate interests. It would

²⁹ Political pressure is routinely brought to bear when politically sensitive issues are on the agenda of university conferences. When the Social Sciences and Humanities Research Council/SSHRC gave York University in Toronto a grant to support an academic conference entitled "Israel and Palestine: Mapping the Road to Peace", the country's Industry Minister at the time (Gary Goodyear) with responsibility for a number of granting agencies asked the SSHRC to reconsider its decision to fund the conference. CAUT/ACPPU Bulletin Online, Vol. 56, No 8, October 2009.

be a tragedy, for the media to not regain its footing and traction, and for the universities to not take on more systematically and energetically the much needed transformational reform and renaissance of the country's media. For it would signal to the powers in government that Canada's media has de facto relinquished its 'fourth estate' mandate and mission; that it is perfectly save to continue the policy of gagging and muzzling federal scientists with impunity; and that this may be an opportune time for government to extend its power plays into the faculty offices and lecture halls of Canada's universities.

The writing is on the wall for all to see. To dismiss the Harper government's tight lid on the free flow of information exchange between government scientists and the media as an aberration that will take care of itself in time, is to underestimate how quickly a deviation from the norm can become the norm. And scientists in the country's universities should not look for solace in thinking: they are not coming after me, therefore it is not my problem. We do well to remember contemporary history where this kind of ostrich reaction led without fail not only to the suspension of academic freedom across all learning institutions but, in rapid succession, also to the curtailment of the right to assemble, to organize, and to freely express yourself without fear of retribution. Canada as a country has come too far to let one of its biggest assets slip through its hands because of a false sense of destiny. It would do well to take to heart what Publius Ovidius Naso, better known today as Ovid, in his treaties *Remedia amoris* recommended to Rome's populace:

Principiis obsta.
Sero medicina parata,
cum mala per longas
convaluere moras.