"States, Power, and Information Technology: Perspectives from History"

Teach-in on University e-Services Outsourcing to U.S. Corporations

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I want to begin my remarks today with a correction. In conversations on campus about the outsourcing issue, we keep using **email** and **eCommunications** as synonyms, and we talk about outsourcing our current email system to the Microsoft Office 365 product. But Office 365 is far more than a replacement of existing email software; it is a comprehensive eCommunications and eCollaboration suite of tools. In using it, or indeed, in using any such suite of tools comprehensively as an institution we will create an archive of our data, not just the email messages we will send and receive and store in the 25 GB we would now have in our inboxes (no need to delete old messages, ever), but also the documents we collaborate on and place in the sky drive (cloud file storage), our calendaring data, our texts and instant messages. In addition to the content itself there is also the metadata that each email, each text, each file, each call contains: dates and times of our activities, and the patterns of our associations – the people who comprise our social and communications networks. It is because we are really talking about archives that I am here today. From the historian's perspective, what the proposed outsourcing plan means is that the University of Toronto will be creating an archive of itself, containing rich source of information about its people and their many and diverse activities. My colleagues in the History department and I suggest that we need to think very carefully about the implications of doing so.

And as historians, we do know about archives. After all, technically, I read dead people's mail for a living. Ambrose Bierce, author of the satirical 1911 *Devil's Dictionary* defined

historians as "broad-gauge gossips."[1] He does have a point. As odd as it may seem to draw

parallels between historical research and the surveillance of state agencies such as the National

Security Agency and CSEC (Communications Security Establishment Canada- they are hiring,

by the way)[2], we historians share with those agencies the desire to know as much as we can

about everything that happened. But of course there are some rather crucial distinctions.

Historians research primarily in public archives; our sources must be identified for our

arguments to be credible, our work is peer-reviewed, and our research results are published and

are available for anyone to read. Nevertheless, I cannot count the number of times colleagues and

I have lamented the lack of documentation on a particular event or wished we had been a fly on

the wall at a meeting of figures key in our research. We do like our archives to be as

comprehensive as possible. So you might think we would look forward to this brave new world

of infinitely richer sources to study.

Well, there is of course the old adage, "be careful what you wish for, because you might

just get it." Before the Snowden revelations beginning this past June of 2013 there was certainly

widespread speculation, science fiction writing and regular Hollywood representations about the

powers of new technology to enhance state surveillance, but we now have significant

information about data collection directed towards both public figures, including world leaders,

and millions of ordinary people by the United States and its National Security Administration on

a massive scale that is greatly disturbing.[3] And this is a very big deal. As other speakers today

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[1] Project Gutenberg Ebook version: http://www.gutenberg.org/files/972/972-h/972-h.htm.
[2] http://www.cse-cst.gc.ca/home-accueil/careers-carrieres/index-eng.html. As University of Toronto political science professor Ron Dibert has noted in a June 2013 *Toronto Star* interview: "The budget for CSEC has more than doubled since 9/11. And this has come at a time when the Canadian government is cutting back agencies. CIDA's been eliminated. DFAIT's closing embassies. The money is all going to the spooks." Mitch Potter, "U.S. online snooping: What Canadians need to know," *Toronto Star*, 10 June 2013, http://www.thestar.com/news/world/2013/06/10/us_online_surveillance_canadian_cyber_expert_weighs_in.html.
[3] The Manchester, United Kingdom paper *The Guardian* broke the story. The source documents can be viewed here: http://www.theguardian.com/world/the-nsa-files.

have made clear, with Microsoft Office 365, our University of Toronto e-Archive will be outside

of Canadian jurisdiction, outside of Canadian law and our data will not have protection from

lawful state surveillance of foreign nationals in the USA. And this concerns us. Rather a lot, in

fact. Because as a historians we also know more than a thing or two about what states do when

given (or when they take) the power to create and use archives of information against people for

their own political ends.

Although I could take you on a long journey through time about what states and empires

do with power and the consequences for people, a few examples in living memory should

suffice. We can of course look to the ways in which totalitarian regimes, such as East Germany,

created secret archives after World War II and how its secret police, the Stasi, used that

information to monitor and control the population.[4] Western democracies also have their own

histories of these practices. Even in Canada, left-wing academics and prominent activists have

been the subject of RCMP surveillance and harassment before CSIS was created, when "national

security" was part of the RCMP's mandate. The list includes Tommy Douglas, now regarded as

a principal architect of publically-funded health care in Canada, who also served as

Saskatchewan's premier (1944-1961) and the national leader of the New Democratic Party from

1961-1971.[5] In the United States, the Red Scare of the 1950s saw the wide-spread suspension of

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[4] Jefferson Adams, "Probing the East German State Security Archives, *International Journal of Intelligence and Counterintelligence*, (2000) 13, 21-24.

[5] Douglas was spied on through most of his career. As Whitaker *et al* write of Douglas, who was voted 'the greatest Canadian of all time' in a 2004 national poll," that he was also "the subject of an apparently voluminous RCMP dossier. The declassified security service file on him shows that the Mounties surreptitiously attended his speeches, analyzed his words for evidence of subversion, and even eavesdropped on private conversations." See Reginald Whitaker, Gregory S. Kealey and Andrew Parnaby, *Secret Service: Political Policing in Canada from the Fenians to Fortress America*, (Toronto: University of Toronto Press, 2012), 336. See also the excellent essays in Gary Kinsman, Dieter K. Buse, Mercedes Steedman, eds. *Whose National Security?: Canadian State Surveillance and the Creation of Enemies* (Toronto: Between the Lines Press, 2000) for histories of ordinary individuals who became targets of state surveillance for their political associations. See also Ray Argyle, Steve Hewitt," 'Information believed true': RCMP security intelligence activities on Canadian university campuses and the controversy surrounding them, 1961-71, *The Canadian Historical Review,* 81.2 (Jun 2000): 191-228.

civil liberties there, a period that personally affected our notable colleague, the Holberg-prize winning and internationally lauded historian of the early modern world: Natalie Zemon Davis.[6] As a result of being targeted for challenging the legality and constitutionality of the House Committee on Un-American Activities (HUAC), she and her husband lost their passports in 1952. She was unable to complete her research in France; her passport was not returned until 1960.[7] Her husband, noted mathematician Chandler Davis, lost his faculty position at the University of Michigan for refusing to name names to HUAC; he ultimately served six months in jail from 1959-1960.[8] During the civil rights movement, many leaders including Martin Luther King Jr. were the targets of FBI surveillance.[9]   But the Red Scare and the surveillance and harassment of civil rights protesters, to give but two examples, occurred in the USA in the pre-9/11 world, which was significantly different from today for two important reasons.

1) there was, and this may surprise you, actually more legal constraints on what law enforcement could do than today;

2) the surveillance technology was nowhere near what it is today.

Imagine if HUAC was operating today. There would be no need to ask people to "name names." because the NSA and law enforcement agencies can now build complex maps of our associations from the digital metadata we produce on a daily basis. But technological change alone is only

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[6] The Holberg International Memorial Prize is the most prestigious award given for outstanding research in the humanities. Awarded by Norway, the prize is worth roughly ¾ of a million dollars (http://www.holbergprisen.no/en). Zemon Davis received the prize in 2010 reflecting her lifetime achievement as a social historian of the early modern world.

[7] Natalie Zemon Davis, How the FBI Turned Me On to Rare Books," 30 July 2013 http://www.nybooks.com/blogs/nyrblog/2013/jul/30/fbi-turned-me-on-to-rare-books/;

[8] He served 6 months in jail because, in defending himself he (and two others) did not invoke their Fifth Amendment protection against self-incrimination (for what crime had they committed?), instead relying solely on their First Amendment right to free speech in order to challenge in the unconstitutionality of HUAC. They eventually lost their cases in a Supreme Court split decision. Chandler Davis, "The Purge," in Peter Duren, ed. *A Century of Mathematics in America: Part 1*, (Ann Arbor: American Mathematical Society/ University of Michigan, 1988), 412-428. http://www.ams.org/samplings/math-history/math-history.

[9] David J. Garrow, *The FBI and Martin Luther King, Jr.: from "Solo" to Memphis*, (New York: W.W. Norton, 1981).

one part of the story. In the post 9/11 world American lawmakers have given their intelligence agencies unprecedented, largely unlimited and largely unchecked powers.   In addition, there are data-sharing agreements between the United States, Canada, Britain, New Zealand and Australia (referred to as the 'Five Eyes' alliance).[10] And it was this kind of data sharing (you spy on my citizens, I spy on yours, because we are legally constrained from spying on our own), you may recall, that led to the unlawful and unwarranted arrest, rendition and torture of Maher Arar.[11]

The key point here is that is **metadata** matters. All of the cases of state surveillance that I mentioned were concerned with mapping the *associations* people had with one another, associations that can now be made by analyzing our patterns of eCommunications. Historians well know the value of metadata. In the colonial archives in which I work, the eighteenth and nineteenth century correspondence logs of incoming and outgoing mail that was kept by secretaries of colonial officials are crucial sources. A letter on its own tells you a little bit. A letter in the full context of a chain of correspondence, mapped and charted over space and time, helps you asses the importance of the information contained within. Correspondence logs help you track who is talking to whom about what and when. Was the news in one letter of so little consequence that it was never repeated? Or did the information received spark of flurry of correspondence? In my research area of the Great Lakes region, I can spot a significant issue emerging from a small British military post on Lake Huron when letters fan out quickly to all other posts, and up the command chain to the British Board of Trade or perhaps to the eyes of His Britannic Majesty? Metadata is what historians want; it helps to contextualize and identify

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[10] James Cox, "Canada and the Five Eyes Intelligence Community". Canadian Defence and Foreign Affairs Institute Strategic Studies Working Group Papers (December 2012). According to Brigadier-General Cox (Retired), who argues for the importance of the "Five Eyes," intelligence sharing, the alliance grew out of WWII cooperation; the relationship he notes "has existed for nearly seventy years" p. 4.

[11] Canada. *Report of the events relating to Maher Arar*, Commission of Inquiry into the Actions of Canadian Officials in Relation to Maher Arar, (Ottawa, 2006).

significance in texts. Metadata is so important that when it is lacking in archival collections of letters we create it in the form of item level finding aids. And metadata is what the NSA and CSEC want. Digital metadata much easier to analyze with software tools than the content of email, audio and video, because its structure is clearly known (i.e. date, time, to, from,) and best of all, some metadata must always remain unencrypted. To use a paper analogy: you can write a letter in code and put it in an envelope, but you can't encrypt the address information or the letter will never reach its destination. Likewise, packets of information on the Internet need their addressing information in clear text too. So by moving the University's "archive" to the USA, we make the metadata and by extension the patterns of our associations, vulnerable to legal state surveillance, and then data-sharing between the US and Canada or with other friendly states who might be interested in the information.

But so what? How could this proposed outsourcing threaten academic freedom and the ability to conduct research in Canada? In multiple ways: one colleague is in regular correspondence with political activists and colleagues in countries the USA considers enemies. Another is researching the history of undocumented foreign workers in a country that is friendly to the United States and engaging in data sharing agreements with the USA. Disclosure of identifying information about these workers would have very real consequences for their lives. A third works on the history of an important US ally and is researching in an area that is critical of this state's policies towards non-citizens, providing counter-evidence to this state's claims about its treatment of these people. And yes, I am deliberately being circumspect. This is what happens when a chill is cast over academic freedom. People start to worry about what they can say and to whom. And what topics are 'safe' and which are 'risky.' And the capacity for the university to support free and open inquiry is diminished. For those of us who rely on living

informants or who conduct oral history interviews, the reputation of the University is also crucial. If our sources cannot trust what will become of the information they provide us, and how it will be safeguarded, if our sources don't feel safe, they are simply not going to share information with us.

There are other reasons too for postponing the decision about Microsoft Office 365, and consulting more broadly with stakeholders to fully understand all of the issues. The current proposal, along with the earlier decision to outsourcing student and alumni email to Microsoft servers in the USA, were made because for financial reasons, because Microsoft is providing the service "free of charge." Information + Technology Services of the University of Toronto have been working to provide the best service for the least cost (and in fairness, the Office 365 proposal would certainly provide improved eCommunications infrastructure over what we have now). But just because something is the cheapest solution does not mean it is the most appropriate solution. This is true in many sectors: in medicine, in aviation, in aerospace to name but three, the lowest bid may not meet regulatory, safety or mission critical requirements.

In thinking about our many and diverse stakeholder requirements, I also encourage you all to read the Information Risk and Risk Management document provided on the Information and Technology Services website.[12] While this version (October 31, 2013) does discuss the University's responsibilities to protect privacy under Ontario's Freedom of Information and Protection of Privacy Act, other regulatory requirements are missing. There is no mention at all, for example, of the Tri-Council Agencies. All faculty with grant-funding from one of three federal agencies: the Social Sciences and Humanities Research Council or SSHRC, the Natural Sciences and Engineering Research Council, or NSERC and the Canadian Institute of Health

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[12] http://main.its.utoronto.ca/about/committees/faculty-staff-ecommunications-consultation/faculty-staff-ecommunications-reports/.

Researches (CIHR) are required to adhere to very specific regulations regarding the secure storage, transmission and retention of research data involving human subjects, which could include everything from digital files of oral history interviews to medical data. Does the proposed solution meet the Tri-Council Agencies requirements? We do not know.

Furthermore, a critical review of the IRRM reveals the document itself will benefit from a more comprehensive review process. At present, the risk of a potential threat actually occurring and its potential impact on the University are described as being either "low," "medium" or "high." And yet there are no criteria defining what these rubrics mean. For example, under the heading "Foreign Legislative Threat," the risk is described as follows "Microsoft is clear about their requirement as a U.S. corporation to release information requested under the USA PATRIOT Act regardless of where that information is stored (even if it were housed on servers physically located in Canada) (p. 45.)" But the authors also note that "Microsoft is also prohibited from informing us about some types of USA PATRIOT Act requests (p. 45)" So while the authors admit they do not have access to the evidence needed to assess this risk of foreign legislation, they still assigned the following descriptors: "Probability: Low, Impact: Medium." One wonders on what this assessment is credibly based. Given what is at stake, we need much greater specificity, rigour and comprehensiveness in our risk assessment documents.

It is not often that we can identify, so close to the event itself, whether something is a watershed moment in history, but I have every confidence that widespread historic significance of what Edward Snowden has revealed will be born out in the years ahead. Those of us in functioning democracies where constitutions currently protect our rights and freedoms including free speech, free association and privacy, must now thoughtfully take up the challenge of

protecting those rights through legislative and regulatory means. To do so will require the commitment of us all and expertise from the sciences, the social sciences and the humanities. I am reminded of a slogan on a T-shirt produced by the University of Utah's School of Humanities: ""Science can tell you how to clone a tyrannosaurus rex. Humanities can tell you why this might be a bad idea.""[13] In this era of rapid technological change, we need the all our skills and knowledge now to keep what has happened in the past in view and to contribute to building the best eCommunications solution for the University of Toronto, which most certainly includes advocating for increased parliamentary scrutiny of our own state surveillance agencies, including CSEC.

As a historian I would like to conclude by also recognizing that this moment represents a tremendous opportunity for the University of Toronto to employ the globally-recognized expertise of its faculty on this issue, framing the discussion in Canada and taking a leadership role in public education.

THANK-YOU

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[13] https://umarket.utah.edu/um2/humanities/productlist.php?category=1&storecookie=1.