



Photo by Emily Smith

SSC Newsletter

Issue 9, March 2022

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From the New SSC Directors

By Director: David Murakami Wood and Deputy Director: Alana Saulnier

With the retirement of Dr. David Lyon, the SSC is undergoing a transition. David Lyon forged a distinct trajectory for the SSC and the surveillance studies community over the past three decades. His influence on the field and leadership within the SSC has been, and will continue to be, influential on both Drs. David Murakami-Wood and Alana Saulnier, but as valued contributors to the surveillance studies community in their own rights, both incoming members of the SSC leadership team have unique visions for the Centre. With these leaders, the SSC has varied skillsets to draw on that provide the foundation for rigorous, thoughtful, and innovative theoretical and empirical contributions with applied policy value.

This change will continue as David Murakami Wood begins a new position as Professor of Critical Surveillance and Security Studies in the Department of Criminology at the University of Ottawa. The SSC has always served as a hub for an international surveillance studies community, and we move into this evolutionary period with recognition of the profound impact that the SSC has made to the surveillance studies field as the entity that it was under the leadership of David Lyon.



*Wishing David Lyon well on his retirement, June 2021
Joan Sharpe, David Eliot, David and Sue Lyon, Delano Aragão Vaz, David Murakami Wood, Alana Saulnier, Özge Girgin and photo by Emily Smith*

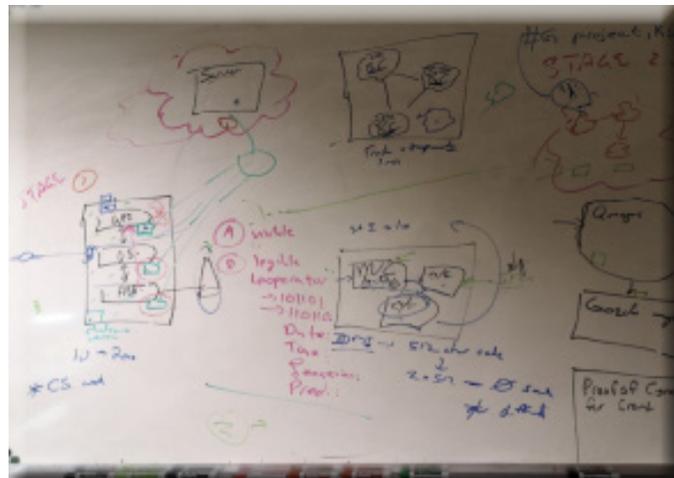
A Day in the Life of Metadata

By Tommy Cooke

In the continued pursuit of striving to 'see' surveillance data, the SSC and A Day in the Life of Metadata (ADITL) press on. Led by Dr. Tommy Cooke and Dr. David Lyon, ADITL is a multidisciplinary collaboration between social scientists, humanities scholars, and computer engineers to track discrete data flows about location, movement, and mobility within Android smartphones. Motivated to overcome the inability for surveillance studies scholars to visually inspect hidden data streams and processes deep within our mobile devices, ADITL's goal is to make the lifeblood of surveillance capitalism accessible to an empirically-nuanced critique.

In 2018, Tommy and David approached Chris MacPhee (former Director of Operations) at the Centre for Advanced Computing (CAC) to discuss how and whether this was possible. As Chris and his team reminded the SSC, smartphones are black boxes. Precisely how a smartphone's digital architecture 'works' is deliberately shrouded to insulate surveillance capitalism itself.

But even if you could access these processes and their data, what would you do with them? Part of what makes surveillance capitalism so risky and challenging to deal with as a researcher is that its content is asymmetrical. What the data users



Early concept mapping of ADITL's data tracking software, held at the Centre for Advanced Computing during the 2018/19 academic year



Screenshot of ADITL's Data Visualizer, a 3D interactive browser-based software that allows researchers and educators to monitor the movement and transformation of location data within a smartphone's operating system

'see' are never the same as what corporations and governments see and use for profit, entertainment, and security. But what happens if you could see it? As a non-expert investigator without a guide, how could you even make sense of it?

In 2019, the CAC and the SSC formulated an incredible programming team.[1] Led by Mr. Fernando Hernandez-Leiva (Senior Analytics Developer, CAC), the team created two new pieces of software: one that would monitor and document (a) the creation of raw location measurement metadata from within the global navigation satellite system chipset, (b) its delivery to the Android operating system and its transformation therein, and (c) its delivery to both apps and third-parties, such as Mobile Location Analytics companies, such as Predicio. The second visualizes these processes and their data types so that they could be studied by non-experts.

Later that year, ADITL received a Working Group Grant awarded by the Centre for Advanced Internet Studies (CAIS) in Bochum, Germany. Tommy worked with Mr. Chris MacPhee, Dr. Kirstie Ball, Dr. Grant Blank, Dr. William Suk, and Dr. Benjamin Muller to analyze and publicly present ADITL's initial findings for the first time.

[1] ADITL is impossible without the talented efforts of numerous gifted computer scientists, including Nana Boateng, Noor El Alfi, Spencer Kelly, Francesco Virga, Peter Wright, Samir Toubache, and Sanil Andapally. Special thanks to Luci Bast, Aaron Iqbal, Paige Beddoe, and Elise Degen for their incredible support.



Chris MacPhee (center-left) and Tommy Cooke (center-right) along with Benjamin Muller (right-front) Kirstie Ball (right) during ADITLOM's first public presentation, hosted by the Centre for Advanced Internet Studies

To the Working Group team's surprise, raw location metadata do not look nor read anything like, for example, a GPS coordinate. Instead, they look like this:

```
Raw,169806580,227724071000000,,,1238885499373429248
,0.0,82.0571294752881,2.4674019091539217,16.124495093
118234.54,14,0.0,207,61605369492321,31,23.3,655.643737
7929688,0.9399999976158142,0,0,0,0,0,,,,,0,,3,0,0
```

One of the team's many findings is that each numerical value found between the commas represents a specific measurement or metadata present in navigation satellite signals. One of these many values is a measurement of the physical width of the satellite signal when it is detected by the smartphone's antenna. While the small number may seem innocuous, ADITLOM is investigating its usage by third party analytics developers to create modelling algorithms that are being used in way that dramatically increase the accuracy of a smartphone's location – effectively reducing 5m to 7.5m location detection radiuses to spaces smaller than 3 centimetres. ADITLOM's team is concerned about the ways this number will erase any geophysical ambiguity surrounding a user's location, effectively undermining any sense of location privacy whatsoever.

The team is also concerned by the rapid expansion of industrial and governmental uptake of these variables across the globe. ADITLOM is actively discovering how they are being used to develop new asset tracking, anti-spoofing, identification verification, and predictive analytics technologies sponsored by, for example, the European Space Agency who works with developers in the

maritime, aerospace, agriculture, sports, and national defence industries to extract these raw location measurement metadata from smartphones in order to innovate new location tracking, discovery, and analytics solutions.

ADITLOM recently conducted its largest experiment. "Big Data Exposed: What Smartphone Metadata Reveals About Users" is a recipient of the Queen's University Wicked Ideas Award, which funded a more comprehensive data tracking experiment to monitor how third-party advertisers extract location metadata from Kingstonians' smartphones in real-time. The project is co-led by Dr. Dan Cohen and supported by Dr. Dongmei Chen, both of the Department of Geography and Planning at Queen's University. Analysis of this experiment's findings, along with multiple publications of all of ADITLOM's discoveries to date, will be shared throughout the 2021/22 academic year.

ADITLOM's visualization software is currently being further developed as a teaching and learning aide to assist students, instructors, and civil society investigators to workshop with location metadata in real-time. ADITLOM is working with Dr. Valerie Steeves and The eQuality Project at the University of Ottawa to develop new ways of educating teenagers about smartphone location privacy awareness.

Updates on ADITLOM, as well as collaboration opportunities, can be found by visiting aditlom.org.

Tommy Cooke is now senior consultant of artificial intelligence at Deloitte.



Nana Boateng and Fernando Hernandez-Leiva double-checking ADITLOM's location data activity monitoring software during the Big Data Exposed experiment held in Kingston, Ontario, Canada in September 2021

A Neurotech Future: Ethical, Legal and Policy Perspectives Virtual Conference 2021

By Susan Boehnke

The Neurotech Future Conference was a collaborative project envisioned in 2019 by Susan Boehnke (Centre for Neuroscience Studies), David Lyon (SSC), and Martha Bailey (Faculty of Law) for which they obtained a SSHRC connection grant and other funding (Queen's Law, CNS, Ontario Brain Institute). Three graduate student research assistants were supported by this SSHRC grant and were instrumental in planning the conference - Rohit Revi (PhD candidate, SSC), Pauline Gapielian (PhD candidate, Neuroscience) and Jonathan Coutinho (PhD Candidate, Neuroscience).

This meeting brought together a diverse group of



David Lyon

Susan Boehnke

Martha Bailey



Pauline Gapielian



Jonathan Coutinho



Rohit Revi

neuroscientists, social scientists, industry experts, and policy makers to discuss the technological, ethical, legal and policy issues surrounding emerging neurotechnologies. The conference was held April 22-23, 2021. The first day we had nearly 300 attendees throughout the 8 hr webinar portion of our conference. Panelists and audience members included academics, industry partners, graduate and undergraduate trainees and members of the community. The online conference consisted of short-talks and panel discussion across four themes: 1) Separating Neuroscience Reality from Science Fiction 2) Neurotechnology, Surveillance, and Data-Privacy 3) Neurotechnologies and Implications for the Legal System and 4) Policy and Regulation: Perspectives from Industry and Government. We also had two keynote speakers - Judy Illes (co-chair of the Canadian Brain Research Strategy and Head of Neuroethics Canada) and John Weigelt (National Technology Officer, Microsoft Canada). Students and industry representatives were given the opportunity to network during our conference in lunch-time break out rooms. Details and video of the conference can be found here: <http://neuroscience.queensu.ca/neurotechfuture>

We had over 20 people attend each of our 3 workshops on April 23, with the following goals and outputs achieved:

Workshop 1.

Goal: To build transdisciplinary research on neurotechnology at Queen's to address the emerging challenges.

This workshop was led by graduate research assistant Rohit Revi, and was used to brainstorm new research ideas at the intersection of Neuroscience and Surveillance ("Neurosurveillance").



Speaker Panel for "Neurotechnology, Surveillance, and Data-Privacy", including from top left David Lyon (SSC, Sociology), Susan Boehnke (CNS, DBMS), David Murakami Wood (SSC, Sociology), Jason Gallivan (CNS, DBMS, Psychology), Catherine Stinson (Philosophy/Computing), and Brenda McPhail (CCLA)

Output: a grant was submitted to New Frontiers in Research Fund (NFRF, October 2021) entitled "Neurosurveillance: emerging forms of neurological monitoring and control, and the implications for democracy and human rights" lead by SSC director David Murakami Wood, along with co-PIs Susan Boehnke (Neuroscience) and Claudio Soares (Psychiatry) and industry collaborator Yannick Roy (NeuroTechX).

Workshop 2.

Goal: To develop graduate level training in Neuroethics, consistent with neuroethics being the backbone of the Canadian Brain Research Strategy (<https://canadianbrain.ca/>). This workshop was led by graduate research assistant Pauline Gapirellian, and benefited from the presence and feedback of Judy Illes, the director of Neuroethics Canada.

Output: A curriculum for a graduate course in Neuroethics has been developed, reviewed and accepted by the Centre for Neuroscience Studies at Queen's University (October 2021).

Workshop 3.

Goal: To develop a Neurotechnology Certificate Program to train students for the neurotech industry. This workshop was co-led by graduate research assistants Pauline Gapirellian and Jonathan Coutinho (Neuroscience), and included many representatives from the neurotech industry, student groups of neurotech enthusiasts, and a transdisciplinary mix of faculty from Queen's University spanning Neuroscience,

Engineering, Sociology.

Output: A \$300,000 grant to fund a suite of micro credentials on topics related to neurotechnology was successfully obtained from The Province of Ontario Micro-credentials Challenge Fund (December 2021).

Overall, this event exceeded our expectations despite being converted to an online format due to the pandemic. All goals were achieved and it acted as a catalyst for facilitating discussion and collaboration across the neuroscience, engineering, and surveillance studies training programs at Queen's. We received significant positive feedback from attendees via twitter, LinkedIn, and email. This conference, and the networking and collaborations that ensued, have led to our Neurotechnology Microcredentials initiative at Queen's University. This new program will help train the next generation of neurotechnology entrepreneurs, and ensure they are aware of the ethical, legal, and policy issues that they should consider as they go on to innovate in that space.



SSC Virtual Seminars: Fall 2020 to Spring 2021

By Delano Aragão Vaz

These have been unmistakably peculiar times for everyone. Keeping up with our 'normal' activities whilst dealing with the risks that the ongoing pandemic brought on has been particularly difficult. Trying to adapt to our current predicament, the SSC Seminar Series of this past academic year was held entirely online. Taking into consideration that everyone has been increasingly 'zoomed out' by never-ending online meetings, we decided to reduce the number of our seminars and make things a wee bit different.

However, building on the 2019/2020 season experience, when the pandemic first disrupted our lives, we focused on interdisciplinary and joint seminars with academics from different areas, starting our 2020/2021 session welcoming once again **Cynthia Khoo**, from Citizen Lab. Together with **Kate Robertson** (lawyer at Markson Law in Toronto and a Citizen Lab Research Fellow) and **Yolanda Song** (lawyer at Stevenson Whelton LLP), they gave us a glimpse of their most recent

research and ensuing report, *To Surveil and Predict: A Human Rights Analysis of Algorithmic Policing in Canada*. They presented a panoramic view of policing and surveillance in Canada and painted an overall picture of how the use of such technologies may pose a threat to fundamental freedoms and rights protected under the Charter. Moreover, they weaved into their talk what oversight must look like in the decades to come, pointing out how the principles of reliability, necessity and proportionality should guide future law reforms.

Our following seminar was a natural continuation of this talk with our friends from Citizen Lab. We had the pleasure to welcome next **Teresa Scassa** (Canada Research Chair in Information Law and Policy at the University of Ottawa), dissecting Canada's forthcoming private sector data protection law, tabled last November. Dr. Scassa highlighted the importance of this new bill to private sector data protection, pointing out the new rights and exceptions that may come together in this new law and how, combined, may implement a more stringent enforcement regime. As the bill was, then, about to move to the consultation stage, the talk also focused the most important changes of this new law as well as its shortcomings.

As the pandemic continued to rage throughout the planet, we had two guests from the Global South. Not only did they shed some light on how surveillance differently affects people from less privileged parts of the world but also spotlighted the impact of the global health crisis on

people who already struggle for basic human rights as a daily routine. **Rafael Evangelista** (Unicamp, Brazil) and **Rodrigo Firmino** (PUC-PR, Brasil), both founding members of LAVITS, talked about the challenges that the pandemic has been imposing in the Global South, highlighting how the current political environment, together with the well-known historical inequalities in Brazil, has framed public policy (or the lack of it) and surveillance technologies as a response to the pandemic. They also talked about eventual and undesirable consequences – and their lasting effects – that the fast and widespread adoption of surveillance technology as a 'quick fix' might have. This conversation was important not only to discuss eventual and (sometimes) unintended consequences of digital technologies but also as a reminder of the quickly forgotten abyss that exists between North and South, brought once again to the fore by the present global health crisis.

In another joint seminar, we had professors **Daniel E. Bromberg** (Carsey School of Public Policy, University of New Hampshire) and **Étienne Charbonneau** (Canada Research Chair in Comparative Public Management; and École Nationale d'administration Publique, Montréal) talking about the relationship between police departments and civilians in an age of video surveillance. They gave us a glimpse of their forthcoming book and focused on what they refer to as the video surveillance's final stage: the 'edit and share' decision to make public – or not – video footages obtained by police body-worn cameras. Based

on research conducted in the United States, they discussed whether the anticipated timing of accountability and trust plays a role in how body-worn camera footage is shared with the public. In order to illustrate how mutual trust informs accountability responses and strategies, they contrasted the preferences and perceptions of transparency of 4,000 US citizens with roughly 600 local police chiefs, presenting charts with the compilation of their main findings.

Almost as an interlude, the SSC, together with the Centre for Research and Security Practices (CRSP), hosted the launch of their book *Big Data Surveillance and Security Intelligence: the Canadian Case*, UBC Press 2020, edited by **David Lyon** and **David Murakami Wood**. With the presence of a few panellists who contributed to the book, the event gravitated around the main themes of the publication, emphasising the wide structural changes that have affected both how security government agencies gather information as well as the unique partnerships which have been fostered by such seismic shifts in the perception and enforcement of national security.

As a reminder that surveillance technologies and national security are not brand-new issues, the following seminar turned around to sneak a peek at the past. Talking about police espionage in eighteenth-century Paris, **Sean Marrs** (Queen's University) explored how the Parisian police worked to keep tabs on foreign tourists, diplomats and spies who lived in la Ville Lumière. By examining how the Paris police developed

a web of informants which covered the lives of almost every foreigner who were in the city, including diplomats and prominent aristocrats, Sean Marrs explained not only an interest aspect of the evolution of policing and surveillance but also how information gathering is connected to decision-making and state-building, reminding us that some present-day predicaments may be deeply rooted in past practices.

The last seminar of this academic year could not have been better. In a light talk and discussion amongst friends, we had Professor **Norma Möllers** (Department of Sociology, Queen's University; SSC; Ingenuity Labs) chatting about some topics of her most recent book, where she argues that justice in Artificial Intelligence should not be limited to algorithms themselves and the data they use and reproduce but should rather represent a broader issue, taking into consideration the people involved in AI production and the culture that shape them. In other words, professor Möllers emphasised, as she engaged in questions from the audience, that as or more important than fixing the algorithms itself, maybe it is time to enquire into how computer scientists are taught and view society.

Although we hope that this Autumn we can return to in-person seminars, it was interesting to see that hosting our events over the internet gave us the opportunity to reach a much broader audience, comprised not only of scholars and academics

based in Kingston or Canada but also of people with different cultural and professional backgrounds, thus making the SSC Seminar more than a purely academic event.

Delano Aragão Vaz is a PhD Candidate at Queen's University and organized the seminars in 2020-2021. Thank you Delano for your excellent work.



The SSC welcomes Dr. Alana Saulnier as an Assistant Professor in the Department of Sociology at Queen's, and Deputy Director of the SSC.

*Dr. Saulnier completed her PhD in sociology from Queen's University in 2016. She returns to Queen's from Lakehead University, where she coordinated the Criminology Program as Assistant Professor in Interdisciplinary Studies, and before that, from the University of Illinois, Chicago. Saulnier's Queen's appointment follows a comprehensive international search process last year. Her recent work focuses on police use of body-worn cameras. She is also active in the Surveillance Studies Network and is an Associate Editor with the journal *Surveillance & Society*.*

SURVEILLANCE STUDIES CENTRE

SEMINAR SERIES

Fall 2021

**Recordings of these talks are available at:
<https://www.sscqueens.org/events/seminar-series>

Research Roundup

Alana Saulnier, Department of Sociology, Queen's University
"Procedural Justice Concerns and Technologically Mediated Interactions with Legal Authorities"

David Eliot and David Murakami Wood, Surveillance Studies Centre
"Minding the FloCs: Alphabet's AI-first strategy and transformations in surveillance capitalism"

Sarah Brayne, The University of Texas at Austin
"Predict and Surveil: Data, Discretion, and the Future of Policing"

Alex Luscombe, University of Toronto
"COVID-19 and the 'Policification' of Public Health Policy in Canada"

Tommy Cooke, Research Fellow, Surveillance Studies Centre, and Dan Cohen, Department of Geography and Planning, Queen's University
"Big Data Exposed: GNSS & the Quest for Accuracy in the Digital City"

Book Launch: **Krys Maki**, *Ineligible: Single Mothers Under Welfare Surveillance*

Winter 2022

Marco Antônio Sousa Alves, Federal University of Minas Gerais, Brazil
"New Power Regimes and Forms of Surveillance: The Pandemic as a Laboratory of Power"

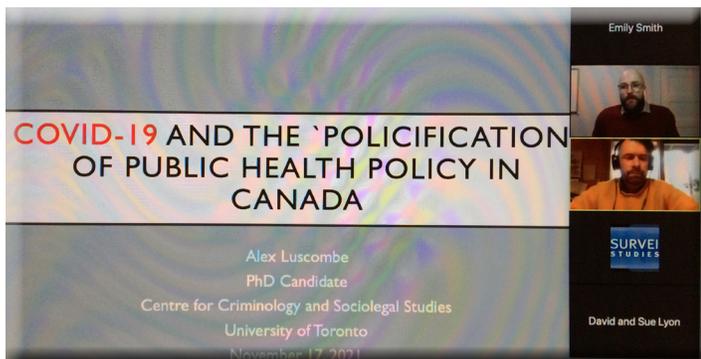
Catherine Stinson, Philosophy and School of Computing, Queen's University
"Adversarial Perception in Deep Learning Networks"

Sarah Igo, Department of History, Vanderbilt University, USA, Joint with the Department of History at Queen's
"Nine Digits: Citizenship, Governance and Data in the Age of the SSN"

Luke Stark, Faculty of Information and Media Studies, University of Western Ontario
"Artificial Intelligence, Prediction, and the Conjectural Sciences"

Carissa Veliz, Faculty of Philosophy and the Institute for Ethics in AI, University of Oxford, USA
"Enough is Enough: Ending the Trade in Personal Data"

Ronak K. Kapadia, Gender and Women's Studies, University of Illinois, Chicago, USA
"Reimagine Everything: How Insurgent Aesthetics and Queer Collective Care are Transforming Our Worlds"



Alex Luscombe, University of Toronto, giving his virtual talk chaired by David Murakami Wood

The SSC welcomes visiting Faculty **Marco Antônio Sousa Alves**, Assistant Professor of Theory and Philosophy of Law at The Federal University of Minas Gerais (UFMG), in Belo Horizonte, Brazil, from January to May 2022.



Marco Antônio Sousa Alves

#tresdancing Screening Surveillance

The sudden shift from in-person to online classes due to COVID 19 has led to increasingly invasive surveillance technologies in education, including the use of problematic online proctoring software purportedly aimed at addressing academic integrity. The fourth film in the Screening Surveillance series, #tresdancing, speculates on the effects of escalating surveillance and control through educational technology. In this near future fiction narrative, a young person has little choice as they are forced to ramp up their engagement with a new, experimental technology in order to make up for a failing grade.

A virtual screening of #tresdancing and a conversation with the team behind this new film on surveillance and algorithms in educational technology was held at the University of Ottawa on February 22, 2022. The event opened with a virtual screening of the short film, followed by a conversation lead by Dr. Valerie Steeves with creator Dr. sava saheli singh, director Hingman Leung, co-producer Lesley Marshall, screenplay writer Tim Maughan, as well as actor Ann Tunkara who plays the lead character, Frankie.

Dr. sava saheli singh is the creator, co-writer, and co-producer of #tresdancing. Currently a Research Fellow on Surveillance, Society, and Technology with the University of Ottawa Centre for Law, Technology and Society, she was previously the Scotiabank-eQuality Postdoctoral Fellow at the AI + Society Initiative, and before with the Surveillance Studies Centre at Queen's University. sava created the SSHRC and OPC funded multi award winning knowledge translation project, Screening Surveillance – a film series for which she co-produced four speculative fiction short films, co-writing one of them. The films have been screened at film festivals, international conferences, workshops, global public events



Screenshot from #tresdancing, of Frankie trying out her new experimental technology scholAR, a fictional in world e-learning platform

and in classrooms across the world.

This latest film is directed by Hingman Leung, a health researcher, community builder, filmmaker, and a multiple award-winning director. #tresdancing was co-produced by Lesley Marshall, a US/Canadian intermedia artist currently working on independent a/v projects with her company MAVN (Marshall Audio Visual Network). An award-winning filmmaker with films appearing in 40 festivals nationally and internationally. Tim Maughan, the co-writer of #tresdancing, is an author and journalist using both fiction and non-fiction to explore issues around cities, class, culture, technology, and the future. His debut novel INFINITE DETAIL was published by FSG in 2019, and selected by The Guardian as their Science Fiction and Fantasy book of the year. The lead actress of #tresdancing is 15 year old Ann Tunkara, has been acting since she was 4 years old and dancing since she was 8.

This event and the movie were made possible thanks to the support of the Social Sciences and Humanities Council of Canada and the Scotiabank Fund for AI and Society at the University of Ottawa.

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The film and launch event are available on the website:

<https://www.sscqueens.org/projects/screening-surveillance>

10110 11001 **BIG DATA** 01101 **SURVEILLANCE**

S&S Special Issue Published

“Smart Surveillance”, Edited by David Murakami Wood and Valerie Steeves, *Surveillance & Society*, Vol. 19 No. 2 (2021).

This special issue, an outcome of BDS research Stream Three - Governance, explores problematics of “smart surveillance” across a variety of contexts. The issue offers an introductory editorial, six articles, four opinion pieces, an interview, and four book reviews.

Editorial

Smart Surveillance

David Murakami Wood, Valerie Steeves

Articles

Modulation Harms and The Google Home
Mark Burdon, Tegan Cohen

The Noise of Silent Machines: A Case Study of LinkNYC

Audrey Amsellem

Emergency Infrastructure and Locational Extraction: Problematizing Computer Assisted Dispatch Systems as Public Good

James N. Gilmore, McKinley DuRant

The Making of Crime Predictions: Sociotechnical Assemblages and the Controversies of Governing Future Crime

Daniel Edler Duarte

Smart Prisoners: Uses of Electronic Monitoring in Brazilian Prisons during the COVID-19 Pandemic

Maria Rita Pereira Xavier, Ana Paula Ferreira Felizardo, Fábio Wellington Ataíde Alves

How to Watch the Watchers? Democratic Oversight of Algorithmic Police Surveillance in Belgium

Rosamunde van Brakel

Opinion

On the Value of the Counterfactual and How the Smart Home Informs It

SSC Newsletter



Cover image: “Living room of an intelligent building.”
(Image attribution: Jan Prucha via Wikimedia Commons)

Anders T. Christensen, Henning Olesen, Lene Sørensen

Smart Cities as Surveillance Theatre
Lucas Melgaço, Rosamunde van Brakel

The Case for a Ban on Facial Recognition Surveillance in Canada
Tim McSorley

Data Trusts and the Governance of Smart Environments: Lessons from the Failure of Sidewalk Labs' Urban Data Trust
Lisa Austin, David Lie

Interviews

“Smart” Educational Technology: A Conversation between sava saheli singh, Jade E. Davis, and Chris Gilliard
sava saheli singh, Jade E. Davis, Chris Gilliard

Book Reviews

Review of Pallitto's Bargaining with the Machine: Technology, Surveillance, and the Social Contract
Breigha Adeyemo

Review of Brayne's Predict and Surveil: Data, Discretion, and the Future of Policing
Daniel Konikoff

Review of Mountz's The Death of Asylum: The Hidden Geographies of the Enforcement Archipelago
Brandy Cochrane

Review of Lennon's Passwords: Philology, Security, Authentication
Mitch K. Jackson

See: <https://ojs.library.queensu.ca/index.php/surveillance-and-society/issue/view/599>

Google FloCs (Federated Learning of Cohorts): OPC Funded Research

By David Murakami Wood

In 2020, Google announced a move away from unpopular privacy-invasive third-party cookies in their market-leading Chrome browser. Instead, they proposed a new technology, "Federated Learning of Cohorts" (FLoC), the first product of their experimental "Privacy Sandbox." They claimed that this new "privacy-centric" technology was 95% as effective as current targeted advertising.

Funded by the Office of the Privacy Commissioner's Contributions Program, David Murakami Wood and David Eliot from the SSC, and Stephen Thomas and Kelly McConvey from the Smith School of Business at Queen's, are investigating these changes. Our aim was to examine and model the way in which FLoC functioned, to test the accuracy of Google's assertions, and to consider the implications for regulation.

However, in January 2022, in the middle of our project, Google announced the culling of FLoC, and its replacement by a new technology called "Topics API" and another called "FLEDGE." Clearly the situation in the online marketing industry is volatile. We are seeing the emergence of new marketing models using Artificial Intelligence-driven technologies, particularly Deep Learning. These technologies may not use less data but they claim to use less personally identifiable data than in the conventional model.

The emergence and future of this technology has already been shaped by regulation, in particular the European Union's GDPR. States must regulate and to be capable of doing so, they need knowledge and understanding of these technologies, of how and where interventions can be made, the likely consequences, and future possibilities. That's what we aim to provide.

In Memoriam

Arthur "Art" Cockfield

We were shocked to hear of Art's sudden death on January 9 2022. Art has been a trusted friend of the Surveillance Studies Centre for many years, serving on the Executive Board, as a co-investigator in several large-scale SSHRC-funded research projects, as a liaison with the Faculty of Law and as a facilitator of joint events between the SSC and the Law Faculty. He brought valuable perspectives and insights to our collaborative work, along with his cheery disposition, fine sense of humour, and respect for all involved, from students and support staff to senior faculty.



Robert "Bob" Pike

Professor of Sociology in the area of media and communication at Queen's for over 30 years, died on January 9, 2021. He was hospitalized for a lung infection but became infected by COVID. Bob was a very supportive colleague, faithful friend of the SSC and someone with helpful counsel, for many years.

In Memoriam



Arthur Cockfield

Spotlight: David Lyon

With files from Mona Rahman, Coordinator, Research Activities and Communications, Vice-Principal (Research) Portfolio, Queen's University

David Lyon is a global leader and pioneer of the interdisciplinary Surveillance Studies field. He led what began as the Surveillance Project at Queen's University in 2000, and later became the Surveillance Studies Centre (SSC) in 2010. The first ever, world-wide, the SSC is a global multi-disciplinary project drawing critical attention to the widespread implications of rapidly accelerating new surveillance technologies. It is Lyon's ability to draw together a community of scholars that has led to the flourishing of the SSC seminars, research collaboration, including publicly accessible reports and a celebrated short film series. He has inspired dedicated faculty and graduate students, and hosted visiting scholars and students as well as included partners, such as federal and provincial privacy commissions, businesses and civil liberties groups.

During this time, David has been the Principal Investigator on four major multidisciplinary, collaborative SSHRC-funded projects based at the SSC totalling \$7.2M including: a \$2.5M Major Collaborative Research Initiative (MCRI) grant to study *The New Transparency: Surveillance and Social Sorting* (2008-15), and a \$2.5M Partnership Grant to study *Big Data Surveillance* (2015-20). These are some of the largest and most prestigious grants available for the social sciences in Canada.

Lyon's work has attracted countless visiting professors, postdocs and graduate students to the SSC from around the globe. Teaching undergraduate and graduate courses on Surveillance and Privacy, and most recently on Pandemic Surveillance. He also initiated the biannual Surveillance Studies Summer Seminar (2009), an intensive, project-driven, mutual learning school for 20 international doctoral students and postdoctoral fellows. His warm and welcoming spirit have inspired many gatherings and memorable moments with visitors at his home



Photo by Emily Smith

David Lyon at his home in Kingston, with his retirement memory book, thanks to all those who contributed.

and cottage with his wife Sue, four children and eleven grandchildren.

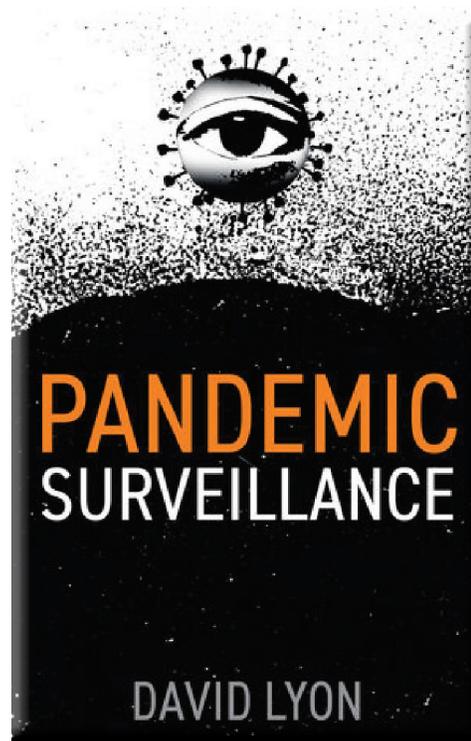
Since the 1980s, Lyon has demonstrated how contemporary societies have seen massive increases in surveillance capacities. His book, *The Electronic Eye* (1994), marked the birth of "Surveillance Studies." He also developed the now well-known concept of "social sorting," used by scholars globally. The attacks of 9/11 further intensified global surveillance practices, analysed in Lyon's *Surveillance after September 11* (2003). His trademark is innovative exploration of surveillance trends. *Liquid Surveillance* (2012), is a dialogue with Zygmunt Bauman about power, technology and morality. Lyon contextualizes former NSA contractor Edward Snowden's revelations in *Surveillance After Snowden* (2015), questioning surveillance practices and challenging us to reimagine more ethical ways forward with privacy, civil liberties and 'data justice' at the forefront. *The Culture of Surveillance* (2018) shows how internet platforms, especially social media, enable and normalize everyday participation in surveillance, with responsibilities for all. Lyon's latest book, *Pandemic Surveillance* (Polity, 2022) examines the magnitude of COVID-19-related surveillance expansion, revealing an urgent need for new policies relating to surveillance and data justice.

Lyon's initiative and leadership in surveillance studies has inspired generations, and been recognized with numerous prestigious awards including: a Killam Fellowship (2008), Fellowship in the Royal Society of Canada (2008) and the Academy of Social Sciences, UK (2013), the SSHRC Impact: Insight Award (2015), an honorary doctorate from the Università Svizzera italiana, Switzerland, an Outstanding Achievement Award (International Surveillance Studies Network, 2018), and the Molson Prize in the social sciences and humanities (Canada Council for the Arts, 2020).

Lyon educates and informs the public of the consequences of living in "surveillance societies," in an accessible manner, stressing how ordinary people can make a difference. He engages in policy debates and academic discussions on various media platforms. Lyon's public presentations span Canada, Britain, Japan, Australia, the US and Israel/Palestine. Audiences include community groups, policy, political, and technology leaders, and the general public. He participates in popular media in North America and internationally and consistently raises public awareness about surveillance so individuals and organizations can make informed decisions regarding sharing personal information.

Lyon's findings have informed decision-making processes and have been implemented to protect and enhance the civil liberties and freedoms of all Canadians. He has worked with policy, legal and human rights groups to highlight privacy, human rights and social sorting aspects. International governments and NGOs seek his expertise on surveillance issues. He has encouraged and mentored successful

"Lyon educates and informs the public of the consequences of living in "surveillance societies," in an accessible manner, stressing how ordinary people can make a difference."



David's latest book, published January 2022, Polity Press.

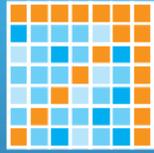
collaborative research networks throughout North America, in Europe, Asia, and Latin America and is dedicated to bringing this research to the world stage.

David Lyon has retired as professor of Sociology at Queen's University, and Director of the SSC, but continues as the Principal Investigator of the Big Data Surveillance Partnership grant until June 2022. You will likely find David exploring his multitude of interests including writing, running, biking, swimming, painting, cottaging and visiting with a plethora of family and friends. Happy retirement David!



David and Sue Lyon with his previous PhD students in Aarhus, 2018: Alana Saulnier, Ozge Girgin, Daniel Trottier, Jason Pridmore, Ciara Bracken Roche, Midori Ogasawara and Ozgun Topak, all of whom who have gone on to faculty positions in Surveillance Studies.

Events



**BEYOND BIG DATA
SURVEILLANCE:**

FREEDOM AND FAIRNESS

University of Ottawa and online, FSS Room
May 18-19, 2022

Surveillance Studies Virtual Seminar Series:
<https://www.sscqueens.org/events/seminar-series>

For the events calendar, go to:
<http://www.sscqueens.org/events/calendar>

SSC Members Publication News

"Minding the FLoCs: Google's Marketing Moves, AI, Privacy and the Data Commons"

By David Eliot and David Murakami Wood, *Centre for International Governance Innovation (CIGI)*, May 20, 2021.

"Why we need to seriously reconsider COVID-19 vaccination passports"

By Tommy Cooke and Benjamin Muller, *The Conversation*, May 19, 2021

"Pandemic surveillance: from hasty responses to data justice"

David Lyon spoke in the Bradford Alumni Speakers Series, March 16, 2021.

"Google's AI advertising revolution: More privacy, but problems remain"

By David Murakami Wood and David Eliot, *The Conversation*, March 15, 2021.

"Platform Capitalism, Empire and Authoritarianism: Is There a Way Out?"

By David Murakami Wood, *Centre for International Governance Innovation (CIGI)*, Series on Platform Governance, Surveillance and Privacy, March 15, 2021.

"The myths and realities around the rise of Chinese tech"

David Murakami Wood on "Future Tense" ABC Radio National in Australia, March 14, 2021.

Body Worn Cameras

CRISP podcast episode with contributors Drs. Alana Saulnier, Bryce Newell, Cynthia Lum, and Michael White and the host, Avery Moore Kloss, Laurier's Podcaster-in-Residence, February 18, 2021.

Algorithms can cause biases in healthcare

Interview with Dr. Sachil Singh, by Phil Gaudreau, School of Graduate Studies, Queen's University, November 2020.

For more news and publications see: <https://www.sscqueens.org/news/categories/new-publication>

The SSC Newsletter was compiled and edited by Emily Smith

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