

Five years of successful Geothink research comes to its conclusion

In this final issue we celebrate the culmination of five years of successful Geothink research and present reflections from our faculty and staff.

Funded by Canada's Social Sciences and Humanities Research Council (SSHRC), the Geothink partnership grant has involved 26 researchers, 30 partners and over 100 students. Geothink has examined the implications of increasing two-way exchanges of locational information between citizens and governments and the way in which technology shapes, and is shaped by, this exchange.

We would like to thank all our partners, co-applicants and students for their continued contribution to Geothink and many of its final outcomes.

[Cover image taken at Geothink's 2017 Summer institute]

In This Issue

- Final Reflections
- Geothink&Learn
- Research Spotlight
- Student Spotlight
- Geothink News
- Recent Publications
- Contact List

Celebrating five years of Geothink research

Funded by Canada's Social Sciences and Humanities Research Council (SSHRC), the Geothink partnership grant has involved 26 researchers and 30 partners.

The grant has also trained over 100 students, will produce [three published books](#) and has already resulted in the publication of more than 30 peer-reviewed manuscripts.

In addition, grant activities have resulted in numerous conferences (including [GIScience 2016](#) and multiple [Spatial Knowledge and Information-Canada](#) conferences), [summer institutes](#), courses, meetings and events. Individual projects and final research products have engaged Canada's municipal and federal governments, non-profit and industry organisations, and the wider public.

For the final issue of our newsletter, we asked Geothink Head [Renee Sieber](#), Geothink Project Manager [Sonja Solomun](#) and Geothink Postdoctoral Researcher [Drew Bush](#) to reflect back on the partnership grant. Below is an extract from this conversation.

Geothink: Tell us a bit about what Geothink has achieved over the last five years.

Sieber: The Geothink grant that was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) is coming to an end. We have done great work in terms of creating new theories, new frameworks, new applications, new datasets and new collaborations.

It's been marvellous in terms of the interdisciplinarity of bringing together

geographers, lawyers, people in the private sector, people and government to work on issues [and in terms of] what's happening to the conversations between citizens and cities. And answering how we can make sure the technology is not an impediment, but actually enhances that conversation.

Geothink: What will Geothink's legacy look like?

Sieber: We have transformed, I'm happy to say, the lives of over one hundred students. I'd like to think that we have transformed the lives of many people in the public and private sectors across Canada. I know it certainly transformed my life. And it has transformed the life of the researchers involved in this project.

So, while this grant ends, that doesn't mean that Geothink as a concept, and as a research trajectory, has ended. Many of our [applications] will live on beyond us, and certainly our research; our own research trajectories have been changed as a result.

Geothink: What has changed since Geothink's inception?

Sieber: I think that we're in a critical moment of data and technological transformation of our governance structures, and we need to remain critical. There's a lot of technological evangelism out there that is that sees no problems at all, with disruptions to labour practices, disruptions to how we get cars, how we book hotels, how we get short-term contracts; all of these [phenomena that] are enabled by technology, are going to be very disruptive and are simultaneously going to be sold only as good things.

How do we make sure that we are carefully critical of these technologies? We



Geothink Head Renee Sieber is an associate professor in McGill's Department of Geography and School of Environment

don't necessarily want to dismiss the technologies; I've never argued that the technologies are inevitable, but we should be able as much as possible to control how the technologies interact with us, and [answer] whether or not they help our interactions with governments, whether they continue to recognise us, whether we continue to see ourselves as citizens; not as consumers or clients, but as citizens with roles, responsibilities and rights vis-à-vis governance.

Geothink: What were your most memorable experience at Geothink?

Bush: I came into the Geothink grant from a unique perspective, not as a student or as a researcher per se, but as the digital journalist, which I think is a unique window into all the different parts of the grant that are going on. And just getting to, you know, speak with [our researchers and partners], to inter-

view them, to represent their work for the public, and to translate some of the more technical work for these broader audiences, was really fascinating. There's so much interesting, detailed and very dynamic, evolving work taking place in the grant collaboratively between researchers and practitioners.

So, for me, that perspective has been really fascinating just learning about the work and seeing how it really has practical effects on the lives of both the people doing it and the audiences that it pertains to. And then more recently as a postdoctoral researcher, I made that step from being an outsider to actually really being engaged and involved with the work taking place, and that has been equally meaningful for me.

Solomun: I started at Geothink two years ago as a project manager for the grant and my experience has been incredibly rewarding, wearing multiple hats and playing multiple roles in any one given day. It's wonderful to be able to learn the skills necessary to engage a multi-stakeholder and multi-partner grant, and to collaborate with researchers in academia as well this non-profit partners and municipal stuff, and to really be involved in the hands-on research that happens in between.

Geothink: What will you take away for the future?

Solomun: One of my biggest personal takeaways has been working for such reputable and intelligent female researchers. I think women in academia



Researchers and students at the Geothink 2016 Summer Institute held at Ryerson University in Toronto for three days of hands-on learning.

deserve more recognition and I think it's been absolutely amazing for me to work with such prolific researchers who are experts in their respective fields. And not just that, but particularly fields in which they research issues related to technology, artificial intelligence and algorithmic governance; fields that women have been historically excluded from. And even in our attempts to be more inclusive, we continue to see women's voices in academia not recognized, not cited, not written about in popular media. So, for me, I'm incredibly grateful and thankful to be around the amazing female researchers that I get to work with daily.

Bush: My key takeaway is the mentorship that takes place as a part of the grant. I think often when we, as researchers, write proposals, we think

about the research, we think about the published outcomes, we think about what topics were tackling, but we don't always think about the impacts that that can have on people who might learn and be touched by the research we're doing. And so I think, being a part of a grant where that's explicit and it's acted upon and that has generated so many successful student outcomes is really effective and powerful.

Sieber: It's been a marvellous experience. [Much of] the work is going to go on even after the grant ends. And of course, we're also looking for new grants to pursue this research.

Keep an eye out on our website for the full conversation in our blog posts and Geothoughts podcast series.

What comes next for Geothink?

"So, while this grant ends, that doesn't mean that Geothink as a concept, and as a research trajectory, has ended. Many of our [applications] will live on beyond us, and certainly our research; our own research trajectories have been changed as a result."

You can keep up to date on future news about the grant via our blog at geothink.ca.



Reflections from Geothink's researchers on the close of the grant

As the grant comes to its conclusion this spring, we have been asking Geothink researchers to reflect on their involvement in the grant over the past five years. We were grateful to receive a diverse range of responses that highlight specific research outputs, the communities engaged, collaborations, travel and student work. Presented below are the reflections sent by our respondents.



Pamela Robinson

"This collaboration has been a fruitful and enjoyable one for me. The chance to work with researchers, students and partners across Canada from a variety of disciplines and perspectives has been amazing. The currency and relevance of our research has magnified over the 5 year course of the grant—I'm grateful for the early lead time we had and proud of the work we have collectively contributed."



Jonathan Corbett

"Geothink has provided a unique opportunity for graduate and undergraduate students under my supervision to collaborate with, and learn from, Canadian leaders and their students in the field of open data and the participatory geoweb. It has broadened their understanding of a fast-developing field of research, it has enabled them to develop important and lasting relationships with future academics in the field and it has supported them to understand the significance of their own research and thus encourage them towards achieving their full potential."



Peter Johnson

"For me the real value of Geothink is the connections that I've been able to make to other researchers in different disciplines, as well as the truly rewarding connections and work done with our partners. I am continually inspired by what they are doing and hope that our work can help to inform their on-the-ground actions."



Teresa Scassa

"This was a five-year journey with so many interesting researchers—both colleagues and students. The conversations across disciplines have been insightful and enriching—and will continue long after Geothink."



Leslie Shade

"The Geothink project has brought together a truly interdisciplinary team of academics, students, and partners from an array of organizations to work together collaboratively on timely socio-technical and policy issues related to the imbrication of data in our cities and communities."



Stephane Roche

"Because digital literacy is mainly dependent on spatial thinking and reasoning abilities, the time I have spent as a Geothink researcher was a step forward in better understanding the radical societal transformations resulting from the development of the digital and smart anthropocene urban environments."



Jean-Noe Landry / Open North

"OpenNorth benefited tremendously from its partnership with Geothink over the years. We collaborated with leading researchers and several interns to publish cutting edge research in the field of open data and urban resilience, and to connect the global open government movement to the Canadian context. Geothink helped enhance our applied research capacity and focus our mission on open smart cities. Our partnership is a great example of how academia and a leading not-for-profit organization can mutually benefit from each other."



Muki Haklay

"The breadth and depth of the knowledge of the researchers—from early career to experienced professors—demonstrated the importance of multidisciplinary and interdisciplinary insights to the societal challenges that are emerging from the technology-government interface. Even with a remote engagement, being part of the Geothink network influenced my thinking, research and practice in the area of big data, open data and smart cities."



April Lindgren

"Geothink provided funding and introduced me to Geothink partner Jon Corbett from University of British Columbia, Okanagan who collaborated with me to create the crowd-sourced Local News Map. The map is now the go-to resource for journalists, researchers and citizens looking for up-to-date data on changes to local news organizations across the country."



Scott Bell

"My Top 3: Interaction between and among student-student and student-faculty (from other institutions). Annual and other conference based workshops, sessions and meetings. Pressure AND support to publish outside of each of our comfort zones: It was wonderful to have the scholarly support from such a wide range of top notch researchers."

Geothink&Learn 8 recap: Data driven journalism

At the end of March, Geothink.ca held its eighth monthly Geothink&Learn video conference session on the topic of data driven journalism. It highlighted Geothink's unique interdisciplinary perspective and included a myriad of ideas from our faculty, students and partners.

The rise of big data that is geospatially referenced enables journalists and their organizations to utilize new analytical techniques and approaches to investigate and report the news. Building off computer assisted forms of reporting, data driven journalism allows the analysis and filtering of large data sets to dig deeper into important societal issues or news stories.

The range of applications for data driven journalism can provide a deeper understanding of important societal, governmental, or cultural issues. It also aids in helping journalism to reach new levels of service for the public—including understanding patterns to make decisions based on findings. As such, data driven journalism helps to drive a new brand of reporting that places journalists and news outlets in an increasingly more relevant role.

Geothink's researchers have used big data, crowdsourced data, and new open data sets in conjunction with mapping technologies, applications (apps), and



Geothink's webinars have covered topics from the future of open data to governing artificial intelligence. [Image courtesy of <http://onmedia.dw-akademie.com/>]

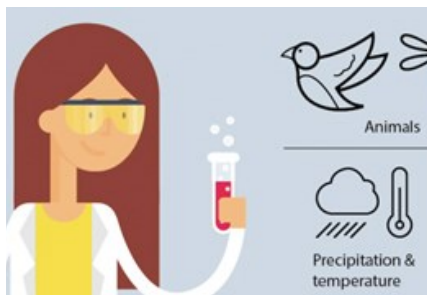
Web 2.0 software to explore applications of data driven journalism. This has even included an investigation of the changing news media market that resulted in concrete data on what parts of Canada are not well-served by print, radio, and television journalistic institutions. This panel of experts brought together leading academic experts and journalists to discuss the opportunities, challenges, and implications of this work.

The convener for the session was Geothink Co-Applicant Jon Corbett, an associate professor at University of British Columbia, Okanagan, [Department of Community, Culture and Global Stud-](#)

[ies](#). The speakers included Roberto Rocha, an investigative data journalist at the [Canadian Broadcasting Corporation](#); Fred Vallance-Jones, an associate professor in the [school of journalism](#) at University of King's College, Halifax; April Lindgren, an associate professor in the [Ryerson School of Journalism](#); and, [Zane Schwartz](#), the 2017 Michelle Lang Fellow at the National Post.

###

You can find a recording of this session along with a transcript of the written question and answer session on the [Geothink website](#).



[Catch up on all ten Geothink&Learn sessions on our YouTube channel](#)

Find recordings of all our previous Geothink&Learn webinars on our [website](#) or through our [YouTube channel](#), and keep an eye out for announcements about our final session on our [blog](#). Our panels have brought together academic, non-profit and municipal experts in the fields of smart cities, open data, urban planning and geomatics.

Roberto Rocha: Discussed how data journalism has evolved from a newsroom novelty to a serious storytelling specialization. In its early days, it was fine to dump all the data onto a map or interactive dashboard and let readers explore it themselves. Today, data journalists are expected to find the main story and present it in an engaging way, like any competent storyteller should.

“The [role of data journalists] has shifted from someone who just organizes and presents data to that of an active storyteller, who takes a more active role in what information is important.”



Zane Schwartz: Discussed the [National Post Follow-the-Money Database](#) he created. The project was designed to address widely held frustrations with the way donations to politicians are recorded. He worked with a team of journalists at Postmedia and developers at Qlik to create an accessible search tool for contributions at both the federal level and in every province and territory—a first of its kind.



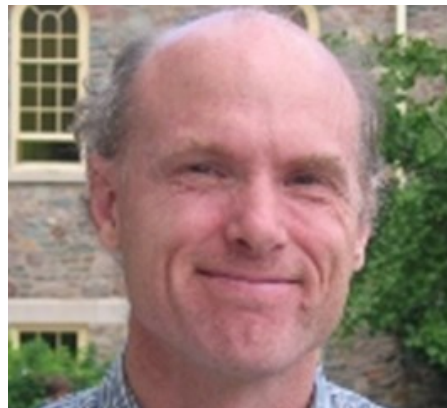
“We’re really hoping with this type of collaboration to make [information more accessible], and I think it’s part of a nice trend towards Canadian open data that makes me excited.”

April Lindgren: Talked about data journalism and local news. In particular, she discussed how the capacity of local news organizations to mine stories from open data is lagging behind the growing availability of government open data sources. She suggested the problems are two-fold: 1) most local journalists still lack the skills they need to use data for storytelling, and 2) a lack of investment in local data journalism projects.

“Our [[Local News Map](#)] has become a real go-to resource for much of the writing and discussion that people are having about what’s going on in Canada.”



Fred Vallance-Jones: Discussed how journalists love to use maps to sell stories because place is such an important aspect of the news. When Master of journalism students at the University of King’s College wanted to tell the story of the [1917 Halifax Explosion](#), they turned to GIS software. Their professor, Fred Vallance-Jones, joined us.



“Our students brought the story of the [Halifax] Explosion to life and in a way that it wasn’t being told anywhere else.”

Reflections on the first Geothink: Checking in with Geothink's community of innovators

By Drew Bush

When [Local Logic](#) co-founder Vincent Charles Hodder stopped by Geothink's 2017 Summer Institute last year at McGill University in Montreal, QC, his presentation was a highlight for many of the students, faculty, and staff in attendance. Hodder's company applies an innovative approach to improving the policies and practices of governments and their citizens through the use of urban geospatial data and modeling.

"We call ourselves urban planners turned data scientists," Hodder told Geothink last summer. "So we're really at the intersection of planning, data—data science—and then technology."

Hodder told students his company was born out of his master's work in McGill University's [School of Urban Planning](#) and through collaboration with students and faculty. At the time, the Canada Social Sciences and Humanities Research Council (SSHRC) Geothink partnership grant did not exist. But it would have been quite useful during his studies, he noted.

"So having people think about these issues while they're in school I think is really important," Hodder said. "And I think there is a lot of space for innovation in terms of cities, in terms of smart cities, and in using technology and having an impact on cities. So much so that we actually started a Meet-Up group in Montreal called [Cities and Tech](#)."

Hodder and his colleagues have done more than start this group. His company has more than 15 full-time staff—including a former Geothink student. In the past few years, Local Logic has also expanded on its initial contributions to



Co-founded in 2014 by urban planners turned data scientists, Local Logic helps its users make better, more informed decisions when it comes to location.

[Image courtesy of www.montrealintechology.com]

improving how urban development takes place or how citizens choose their lodging. (His company's approach allows you to know things like if your next prospective host on [Airbnb](#) might be located on a quiet or noisy street.)

Local Logic's new ventures have moved beyond private real estate to focus on impacting municipal and urban planning and policy. He argues that his company stands at a crossroads. Their task is to redefine how governments create and present physical projects and accompanying policies so that individual citizens will better understand the impacts on their own lives.

"A lot of times these very large investments in public transportation, for example, are hard to understand for the citizen because it's really difficult to kind of see the concrete impact on your life and on your daily activities," Hodder

said. "So, using our data we'll be able to bring it down to that level of analysis and really see the difference in terms of, you know, housing values, lifestyle, and access to specific modes of transportation."

"[Local Logic] mak[es] it much easier for people to understand the type of impact it will have on their live," he added. "For them, the citizens, to be able to make better decisions on whether or not to support these initiatives."

Hodder's company takes urban geospatial data collected in cities from now ubiquitous sensors and digital technologies such as smartphones. From this data, he and his colleagues work to painstakingly build models of urban spaces. This work starts with each individual street segment. On each street segment, coders must input all types of attributes relevant to a given project.

These might include the width of streets, the height of buildings, the tree canopy, or how streets connect to adjoining infrastructure.

The resulting model holds a 94 percent confidence rate when applied to practical situations. It has been used to determine how best to place [Bixi Bike](#) locations in Montreal and to help housing developers better understand the needs of their potential customers. Future work may even evolve to include decision-makers in the federal government.

“We thought, what if we applied this way of analyzing the city to these kind of more macro issues as well,” Hodder said. “And then we realized there was this huge opportunity and there’s all this

data available.”

Take a not-so-hypothetical situation as an example. Imagine one day that city officials in Quebec City and surrounding regions are planning a new bridge to cross from the North Shore to the South Shore of the Saint Lawrence River. Wouldn’t it be beneficial for governmental officials and their citizens to know how an automobile bridge versus one meant for bus rapid transit or rail affects traffic in surrounding neighborhoods and roads?

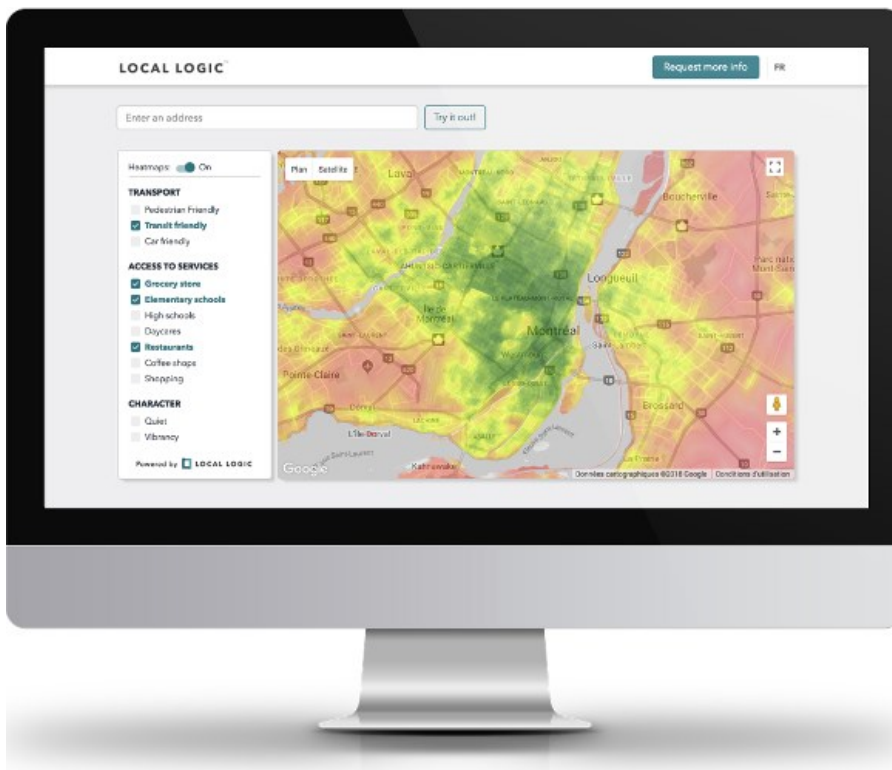
Local Logic’s effort to bring together academic researchers and stakeholders (who use technology to tackle urban problems) reflects an aim shared with the now concluding Geothink partner-

ship research grant. The company’s work mirrors many of the lessons learned by Geothink’s researchers, students, and nonprofit, industry, and municipal partners. This helped to make Hodder’s presentation last summer quite compelling.

“It’s exciting to say,” he said. “But maybe we’ll have a real impact on the ways that cities are actually being built.”

###

If you have thoughts or questions about the article, get in touch with Drew Bush, Geothink’s digital journalist, at drew.bush@mail.mcgill.ca.



“Local Logic focuses on collecting, cleaning, and combining data to help travellers, home buyers, and consumers make better, more informed decisions when it comes to location.”

Researcher spotlight: Leslie Regan Shade discusses recent and upcoming research

Leslie Regan Shade leads the Play Policy: Young Canadians, Participatory Digital Culture and Policy Literacy research program.

A Geothink co-applicant and professor in University of Toronto's [Faculty of Information](#), [Leslie Shade's](#) research centres on the social and policy aspects of information and communication technologies. Her work investigates issues of gender, youth and political economy.

"At Geothink we've got geographers, we've got legal experts, we've got people doing the human side of technologies," Shade has said. "I think it's enriched our collective thinking in terms of looking at the issues involved in open data, how the web and platforms and mobility issues are impacting our everyday lives, how we think about mapping, how we think about power and how we think about social justice policy issues."

In a recent interview with Geothink, Shade discussed some of her ongoing research projects as well as reflecting upon her involvement with the grant. First, in her work on open data, Shade explores how citizens access information about their environment, how data literacy issues mediate information exchanges and the policy implications.

Second, as part of the [eQuality Project](#) (a research partnership lead by Valerie Steeves, a professor at the University of Ottawa) Shade investigates issues of surveillance and privacy. The project looks at commercial data practices and their influence on the equity of networked spaces being used by diverse groups of young people.

The aim of both Shade's areas of research is to contribute directly to digital media policymaking and outreach materials by disseminating the new knowledge. For example, the eQuality Project group has investigated how economic models underlying e-commerce (i.e. the disclosure of information in exchange for services) can create biases in favour of information disclosure.

In another of her research areas, Shade also investigates how you people engage with social media and the issues surfacing in terms of online equality. In particular, she has worked within the context of the political economy of educational technology. This has involved examinations of how women are participating online and the ways that platforms mediate conceptions of online privacy.

Finally, Shade has been working with a group of Geothink graduate students to develop a [citizen's guide to open data literacy](#). With [Curtis McCord](#) and [Dawn Walker](#), both doctoral students at the University of Toronto Faculty of Information, she has helped develop an updatable guide that aims to provide citizens with tools to understand what makes up open data (OD) and how it can be used in their communities.

The work draws on previous Geothink research on the political economy of the Geoweb conducted by Shade, Harrison Smith (now a post-doctoral researcher at the University of Newcastle) and Geothink researcher [Daniel Paré](#), an associate professor at the [University of Ottawa](#).

"It's still resilient where we're thinking about how to design a citizens' guide to the smart city," Shade said. "One of the things I suggested [is that] we look at is this guide, and how we might apply this



Geothink Co-Applicant Leslie Shade is a professor in University of Toronto's [Faculty of Information \(iSchool\)](#) and Associate Dean of Research at University of Toronto.

model to think about the political economy of the smart city, as an educational guide to the general public."

Shade's interdisciplinary approaches have been mirrored in Geothink's research values and her work continues to extend results from academic research into the wider community.

"I think it's been terrific in terms of taking an interdisciplinary perspective, where you get out of your disciplinary silos, out of your comfort zones, and often learning how to speak different languages," she said of Geothink. "Talking to people and exposing us to different sorts of perspectives has been fantastic and enriching process and I think it's really benefitted our students."

###

You can find out more about Shade's current work at [play-policy.ca](#).

Student spotlight: We catch up with former Geothink student Edgar Baculi

Former Geothink student Edgar Baculi tells us about his research trajectory since graduating from Ryerson University

As a student co-funded by [Geothink](#), Edgar Baculi completed his BA in Geographic Analysis at [Ryerson University](#) in 2016. While in Toronto, Baculi developed interests in geographic information science, geo-technology and data visualization. His biggest love, however, was reserved for mapping and cartography.

After publishing an article in [GoGeomatics Canada](#), Baculi met Geothink Co-Applicant [Claus Rinner](#), Chair of the [Department of Geography and Environmental Studies](#) at Ryerson University. This first contact led Baculi to join Rinner as a research assistant over the next two years. Together, they have explored questions about geographic open data.

In particular, Baculi and Rinner examined the influences of open data on public understandings of urban environments and how open data is shared and used by the community it serves.

During his penultimate year, Baculi further expanded his engagement with the Geographic Information Science research community. He presented at the [Spatial Knowledge Institute Canada](#) conference, published for [GoGeomatics Canada](#), and was featured in an article with Rinner for [Cartouche](#), the [Canadian Cartographic Association](#)'s newsletter.

Following his graduation in 2016, he took on governmental and commercial work before returning to Ryerson to

begin his [Master's in Spatial Analysis](#) in 2017. His graduate research builds on his experience with open data based in social and urban geography. It focuses on the federal government's plan for a [National Housing Strategy](#). Baculi will examine potential rollout of this strategy in the [City of Toronto](#) in relation to the importance of housing adequacy or housing repairs.

During the past year, Baculi has supplemented his studies by taking on an internship at the [Ontario Ministry of Environment and Climate Change](#). He has also finalized the manuscript reporting findings from his undergraduate research, which was published in [Urban and Regional Information Systems Association](#) (URISA) in December 2017. This piece was entitled '[The Geospatial Contents of Municipal and Regional Open Data Catalogs in Canada](#)' and was co-authored by Rinner and [Victoria Fast](#), an assistant professor at the [University of Calgary](#).

In a recent interview with Geothink, Baculi pointed to the value of these varied research experiences: "publishing was an academic growing up experience—it taught me how much it takes to understand [a topic] and get validation in academia."

On how his in Geothink has influenced his research, he said: "from [early research collaborations] I got to see my connections branch out into other areas such as Geothink."

"We have all these relevant disciplines—economics, sociology, communication, journalism—working together on topic of open data," he added. "It opened my mind to who can benefit from these tools. It won't just be GIS-literate people and academics, but also the wider com-



Edgar Baculi is a graduate researcher in the Spatial Analysis Master's Program in Ryerson's Department of Geography.

munity. Geothink was important in letting me know insights from other perspectives."

On a practical level, the skills Baculi built as a researcher helped lay the foundation for his success both in and outside of an academic context. His collaborations and studies have informed the big questions his research asks about how geographic data is collected, shared and interpreted to serve communities.

What does the future have in store for Baculi? He hopes to continue to pursue his fascination with the use of maps and geographic information in work with the wider community.

"As for when I graduate, I see myself in government, or NGO, or maybe even a corporation with an interest in urban studies or urban well-being," he said.

You can find out more about Baculi's research on his personal [website](#), or follow his work on twitter at [@edgarbaculi](#).

Geothink research features in final issue of URISA Journal

Edited by Claus Rinner and Victoria Fast, the final issue featured a range of Geothink research on open data mediation in Canada

Two Geothink researchers, [Victoria Fast](#) and [Claus Rinner](#), edited a December 2017 special issue of the [Urban and Regional Information Systems Association journal](#). The issues featured a range of interconnected Geothink research collaborations.

Dr. Claus Rinner is an Associate Professor in the Department of Geography and program director of the Master of Spatial Analysis (MSA) at Ryerson University, and Dr. Victoria Fast Assistant Professor at University of Calgary. The special issue contained submissions from Geothink Co-Applicants (Peter Johnson, Jon Corbett and Pamela Robinson), Geothink current and former students (Sarah Greene, Mark Gill, Lisa Ward Mather, Edgar Baculi and Suthee Sangiambut) and Geothink Lead Renée Sieber.

In their editorial note, Rinner and Fast explained, “the special issue explores a range of infomediary roles, including government (articles by Johnson and Greene; Gill, Corbett and Sieber), libraries (Robinson and Mather), data formats (Baculi, Fast, and Rinner), and software (Sangiambut and Sieber).

“The cases in this special issue focus on open data mediation within Canada, one of the leading nations of the open data movement and a key contributor to geographic information systems (GIS) and geospatial data infrastructure development.”



The URISA Journal is the peer-reviewed publication of the Urban and Regional Information Systems Association.

URISA emanated from a conference held in 1963 on the campus of the University of Southern California that was set up to trade information on developments in regional information systems. It has since grown into a multi-disciplinary geospatial organization that provides professional training, a vibrant and connected community, advocacy for geospatial challenges and issues, and essential resources.

“The research activities from Geothink are informed by close collaborations with professionals from federal, provincial, and municipal governments across Canada, private-sector firms, and non-profit organizations,” Fast and Rinner said. “These collaborations have given Geothink researchers an in-depth and behind-the-scenes understanding of what it takes to make data ‘open.’”

Here, we present the titles and abstracts from the final issue. The full publication can be found at http://www.urisa.org/clientuploads/directory/Documents/Journal/Vol28_final.pdf.

Who Are Government OpenData Infomediaries? A Preliminary Scan and Classification of Open Data Users and Products

Peter A. Johnson and Sarah Greene
Open data, that is, the provision of government data in a publicly accessible, machine-readable format, with liberal usage terms, has become commonplace. Despite the promise of open data, there are many questions about who is accessing government open data and what they are using it for. This research presents a characterization of the infomediary, a third party who accesses government open data and creates value-added products from it. Using four major Canadian municipal open data providers, we present an information scan and classification of open data infomediaries and the products they create. Five classifications of infomediary are proposed: government, private sector, NGO, academic, and media. Within each of these classifications, the type of infomediary products created and the delivery method used are summarized. Findings from

this research indicate a diversity in infomediary actors and products, but that this activity is largely concentrated in government and private sector infomediary types. Further considerations of the impact of infomediary activity on government open data are presented as important future directions of research.

Exploring Open Data Perspectives from Government Providers in Western Canada

Mark Gill, Jon Corbett, and Renée Sieber

This paper explores the roles that municipal government open data personnel play in the open data movement, and how their emerging roles can increase the societal and economic benefits of open data as well as increase citizen engagement. It then demonstrates how these roles are affected by the “scale effects” of the municipality. By interviewing municipal government open data personnel in western Canada and assessing current open data policies, we look at how open data initiatives are developing and identify where gaps can occur between governments and citizens from the government perspective. Finally, we look at how the size of municipalities affects how open data is developing at different-size municipalities. Currently, there has been limited research into municipal open data initiatives that take into account differences in size. We discuss three issues to emerge from this research that represent the way that government open data initiatives shape the interaction between governments and citizens. These include not knowing who open data users are, the jurisdictional nature of the way that data is managed, and the way that governments perceive what constitutes open data. We hope that by understanding how size is implicated in open data, governments will be more effective in their initiatives and provide better open data services.

Open Data Community Maturity: Libraries as Civic Infomediaries

Pamela Robinson and Lisa Ward Mather

Since the time of ancient Greece, the public library has been an important

civic institution in support of democracy. With their provision of free, accessible information at the community scale, public libraries have a long history that tightly aligns with the goals of progressive local governments now engaging in open data efforts. While libraries and librarians have long positioned themselves as leaders in animating open-information provision, local government open data efforts, thus far, have been more focused on how city hall can make data available rather than engaging people with its use. This paper considers the manner in which public libraries are well positioned to act as intermediaries that render this data useful to the general public. The authors employ the term civic infomediaries to describe how these nonpartisan public institutions have the ability to connect community members with open data in a meaningful and civically engaged manner. This paper first explains the importance of ensuring that open data is accessible and useful to a nonexpert public and then explores the ways in which libraries have the capacity to connect users with open data resources, provide access to necessary technology, and act as a hub for civic digital activities. Ultimately, this paper argues that local government staff with open data responsibilities could be more active in engaging in partnerships with public librarians to create a more dynamic and robust open-government ecosystem.

The Geospatial Contents of Municipal and Regional Open Data Catalogs in Canada

Edgar Baculi, Victoria Fast, and Claus Rinner

Open data have become a symbol of government accountability and transparency, with data inventories growing rapidly in recent years. The open data phenomenon has been examined through communication, political, and legal lenses, but the geographic perspective, which is reflected in the amount of spatial content in the catalogs, has yet to be quantified and monitored. Analyzing the availability and accessibility of geographic information in municipal open data catalogs in Canada is an important

prerequisite to understanding the potential for open data to inform decision making in the public and private sectors. Building on a previous survey completed in 2012, this paper investigates the status and trends of geographic information in Canadian open data catalogs by collecting an inventory of datasets and quantifying its growth. Municipal open data catalogs across Canada were indexed according to the type of their geospatial content. The growth of open data, and more specifically geospatial content, offers the public an opportunity to know, access, and engage with government infrastructure and services.

The Civic Open Data and Crowdsourcing App Ecosystem: Actors, Materials, and Interventions

Suthee Sangiambut and Renée Sieber

Individuals and organizations, software and hardware combine to create an ecosystem in which infomediaries interact with government and its constituents. These infomediaries engage in the production and dissemination of either government-generated or citizen-sourced data, which we collectively call civic data. We argue that infomediaries not only play a role in the valuation of civic data but are involved in data's various transformations before it reaches the end-user, whether citizen or government. We selected five Canadian municipal applications that used civic data. Drawing on qualitative interview data of app developers and government, we characterize each app's ecosystem, the collective of interconnected human and non-human actors within the app's development cycle. Variations in characteristics of apps such as data source, data user, sectoral type, and reasons governing application display different landscapes of influence on civic data creation. Actors in the ecosystem exert control over the structure and form of civic data, such as data hosting, data modification, and representational transforms. Ultimately, the civic data app ecosystem reflects a model of government as a platform, and serves as a caution to current and future government officials wishing to transform civic data into apps.

Publications and Announcements

Kevin Stanley, Eun-Hye Yoo, Tuhin Paul & Scott Bell (2018) How many days are enough?: capturing routine human mobility, International Journal of Geographical Information Science

"... In this paper, we take three weeks of GPS traces from over a hundred student participants in mobile phone-based tracking studies and show that fewer than 14 days of data is necessary to establish complete activity spaces..."

<https://www.tandfonline.com/doi/full/10.1080/13658816.2018.1434888>

April Lindgren, Jon Corbett (2018) The Future of Local News: Research and Reflections, The Local News Map: Transparency, credibility, and critical cartography

"The Local News Map is a crowdsourced web-based mapping tool that invites the public to contribute information about local newsroom startups, closings, and service reductions/increases. As concerns mount about the future of local journalism, the map's data are cited with increasing frequency and it has the potential to influence debate, policy, and other research..."

<http://futureoflocalnews.org/>

Daniel Bégin, Rodolphe Devillers & Stéphane Roche (2018) The life cycle of contributors in collaborative online communities -the case of OpenStreetMap, International Journal of Geographical Information Science,

"... Our study identifies the different phases of their life cycle from a temporal perspective and assesses how these phases relate to the volume and the frequency of the contributions from participants..."

<https://www.tandfonline.com/doi/full/10.1080/13658816.2018.1458312>

Stéphane Roche selected as a Jury Member of the Smart City Challenge, Infrastructure Canada

The Smart Cities Challenge Jury, selected through a transparent and merit-based process, is made up of diverse professionals who are accomplished and publically recognized in fields related to smart cities, including urban planning, architecture, and policy innovation.

The jury will review applications that have been submitted to the competition from communities across Canada. They will assess the applications and recommend up to twenty finalists to the Minister of Infrastructure and Communities.

<http://www.infrastructure.gc.ca/cities-villes/members-membres-eng.html>

Thank you for helping us increase awareness of the work happening at Geothink.

Geothink Research Themes

Theme 1: Anywhere, Anyone, Anytime

We believe that the Web 2.0 and its associated technologies will dramatically shift the way cities talk to their constituents and others. People can communicate with cities from anywhere, outside of a jurisdiction, and at any time, for example, which means outside formal venues like city council meetings. Anonymity implies that you do not know the identity of the contributor. This challenges traditional definitions of community, citizen, and participation. We will evaluate the processes of technology development and that impact on its city and the citizen.

Theme 2: Spatial Authenticity, Accuracy, and Standards

The moment you bring up volunteered geographic information (VGI) (e.g., with Open 311), you worry about the quality of data. This theme considers questions of data structures, standards, and documentation practices used by public agencies. The research produced also aims to develop consensus on terminology, data standards, and dissemination regarding the opening up of government data and acceptance of VGI.

Theme 3: Laws, Norms, Rights and Code

Data related to governance is not simply a technical matter. Issues that are policy-related and legal in nature will be a primary focus as we try to understand the way Geoweb 1) fits within existing laws and policy, and 2) shapes new policies and law. Specific legal domains of interest are privacy, intellectual property, access to information, access to justice, and the interplay between norms, codes and technology with regards to governance.

Theme 4: Open Everything

We will track municipal open data engagement over time, theorize about the impacts of open data on governance, and understand and develop best practices. We also have the opportunity to document these approaches and track the evolution of open data practices over time.

Theme 5: Social Justice

We will explore aspects of Geoweb – Society relationships as they pertain to social justice. We will identify the success and failures of Geoweb for community development. Using a case study approach we will employ participatory research to identify emerging concepts of place, the intersection of community, engagement and social justice, and accessibility to the Geoweb.

Theme 6: Geoweb Political Economy

This theme will focus on understanding the political economy of the Geoweb as it concerns ownership structures, institutions, and policies. Power relationships between actors and processes of inclusion and exclusion among social media owners and users also will be our focus.



Geothink Partners and Collaborators

Name of Organization	City	Province/State	Last/First Name	Email
Centre for Law, Technology and Society (University of Ottawa)	Ottawa	Ontario	Saginur/Madelaine	Madelaine.saginur@uottawa.ca
Centre for Public Involvement (University of Alberta)	Edmonton	Alberta	Cavanagh/Fiona	fiona.cavanagh@ualberta.ca
City of Edmonton	Edmonton	Alberta	Chen/Yvonne	yvonne.chen@edmonton.ca
City of Kitchener	Kitchener	Ontario	Amaral/Nicole	Nicole.Amaral@kitchener.ca
City of Ottawa	Ottawa	Ontario	Giggey/Robert	Robert.Giggey@ottawa.ca
City of Toronto (Information & Technology Metro Hall)	Toronto	Ontario	McDonald/Keith	kmcdonal@toronto.ca
City of Vancouver	Vancouver	British Columbia	Low/Linda	linda.low@vancouver.ca
City of Victoria	Victoria	British Columbia	Follis/Heather	hfollis@victoria.ca
City of Waterloo	Waterloo	Ontario	Jacob/Chris	chris.jacob@waterloo.ca
ESRI Canada	Toronto	Ontario	Hall/Brent	bhall@esri.ca
IBM Canada Limited	Kingston	Ontario	Aldridge/Donald	daldridg@ca.ibm.com
The Neptis Foundation	Toronto	Ontario	Burchfield/Marcy	mburchfield@neptis.org
Office of the Privacy Commissioner of Canada (OPC)	Ottawa	Ontario	Millar-Chapman/Melanie	Melanie.Millar-Chapman@priv.gc.ca
Okanagan Basin Water Board (OBWB)	Kelowna	British Columbia	Sears/Anna	anna.warwick.sears@obwb.ca
Open North Inc.	Montréal	Quebec	Landry/Jean-Noé	james@opennorth.ca
OpenStreetMap - US Chapter	Salt Lake City	Utah	Van Excel/Martijn	m@rtijn.org
Ryerson Journalism Research Centre (RJRC)	Toronto	Ontario	Lindgren/April	april.lindgren@ryerson.ca
Sani International Technology Advisors Inc.	Markham	Ontario	Sani/Aaron	aaron.sani@gmail.com
United States Geological Survey	St. Petersburg	Florida	Poore/Barbara	bspore@usgs.gov

Geothink Partners and Collaborators

Name of Organization	City	Province/State	Last/First Name	Email
eGovFutures Group	Toronto	Ontario	Konga/Jury	jkonga@sympatico.ca
North Carolina State University	Raleigh	North Carolina	de Souza e Silva/Adriana	aasilva@ncsu.edu
Michigan State University	East Lansing	Michigan	Dietz/Tom	tdietzvt@gmail.com
San Diego State University	San Diego	California	Jankowski/Piotr	piotr@geography.sdsu.edu
University of Alberta	Edmonton	Alberta	Cavanagh/Fiona	fiona.cavanagh@ualberta.ca
University of British Columbia	Okanagan	British Columbia	Evans/Michael (Mike)	mike.evans@ubc.ca
University of British Columbia	Okanagan	British Columbia	Foster/Stephen	stephen.foster@ubc.ca
University of California Santa Barbara	Santa Barbara	California	Goodchild/Michael	good@geog.ucsb.edu
University College Dublin	Dublin	Rep. Ireland	Nedovic-Budic/Zorica	zorica.nedovic-budic@ucd.ie
University College London	London	London	Haklay/Mordechai (Muki)	m.haklay@ucl.ac.uk
University of New Brunswick	Fredericton	New Brunswick	Coleman/Dave	dcoleman@unb.ca
University of Washington	Seattle	Washington	Elwood/Sarah	selwood@u.washington.edu

Geothink Researcher Co-applicants

Co-applicants	Name of Organization	Email
Dr. Renee Sieber (PI)	McGill University	renee.sieber@mcgill.ca
Dr. Claus Rinner	Ryerson University	crinner@ryerson.ca
Dr. Daniel Pare	University of Ottawa	dpar2@uottawa.ca
Dr. Daren Brabham	University of Southern California	brabham@usc.edu
Dr. Elizabeth Judge	University of Ottawa	elizabeth.judge@uottawa.ca
Dr. Jonathan Corbett	University of British Columbia	jon.corbett@ubc.ca
Dr. Leslie Shade	University of Toronto	leslie.shade@utoronto.ca
Dr. Pamela Robinson	Ryerson University	pamela.robinson@ryerson.ca
Dr. Peter Johnson	University of Waterloo	pa2johns@uwaterloo.ca
Dr. Robert Feick	University of Waterloo	robert.feick@uwaterloo.ca
Dr. Scott Bell	University of Saskatchewan	scott.bell@usask.ca
Dr. Stéphane Roche	Université Laval	stephane.roche@scg.ulaval.ca
Dr. Teresa Scassa	University of Ottawa	teresa.scassa@uottawa.ca
Alexander Aylett (in Remembrance)	Institut National de la Recherche Scientifique	alexander.aylett@ucs.inrs.ca

Geothink Canada Newsletter

Edited by:

[Sam Lumley](#)

sam.lumley@mail.mcgill.ca

Website:

geothink.ca

Twitter:

[#geothink](#)

[@geothinkca](#)

Email:

geothink.ca@gmail.com

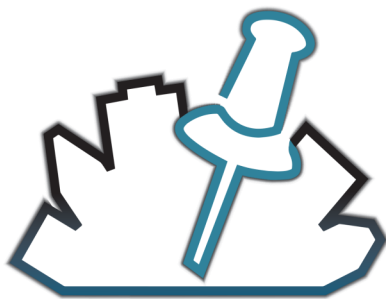
805 Sherbrooke West
Burnside Hall
McGill University
Department of Geography
Montréal, QC
Canada
H3A 3R8

Thank you for your participation in Geothink!

We have greatly appreciated your participation in the Geothink Newsletter and across all our media outlets. This has enabled us to reach a wide audience and have as broad an impact as possible. If you wish to be involved in future output or have any comments about the current issue, please get in touch with the editor.

[@geothinkca](#)

geothink.ca@gmail.com



Geothink