Organizers

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Description

This PhD seminar is the result of a collaboration between two research networks, MinErAL, a Canadian funded Social Sciences and Humanities Research Council (SSHRC) research network on Mining Encounters and Indigenous Sustainable Livelihood, and REXSAC, a fennoscandinavian Nordic Centre of Excellence funded by NordForsk that focuses on Resource Extraction and Sustainable Arctic Communities.

The rationale for this summer school is the boom and bust character of extractive industries, in particular mining and fossil fuel extraction. For example, from the mid-2000s the Arctic was part of a global mining expansion, triggered by high metal prices on the world market as a consequence of a high demand for mineral commodities in East Asia and elsewhere. In 2013 the boom turned into bust, with high-profile Arctic mining projects in Canada, Sweden, Norway and Greenland being discontinued. In 2017 the price fall slowed down and once more investors are now investing money into geological prospecting and mining projects in the north. Although the time horizon of this latest boom-bust was particularly short, this is not the first time in history that the Arctic has experienced such expansion and contraction cycles in resource industries, and it will not be the last. Mineral-rich areas in the isolated Arctic are prone to these dynamics and therefore bear their material and immaterial legacies.

Whether ores naturally run out or prices run low, all mines eventually come to an end, leaving environmental as well as social and cultural footprints behind. These legacies can take the material or immaterial form of memories, identities, nostalgia and loss – economic as well as emotional – or else be a point of departure for creating new opportunities and future visions. They often also take the form of acid mine drainage from waste rock piles and tailings ponds, mining-related production facilities, infrastructures, abandoned or degraded settlements and disrupted services. Considerable discussion has ensued on what to do with such legacies of extraction, spanning from environmental remediation, repurposing for new economic activities, tourism development or projects to preserve mining remains as cultural heritage, and especially how to make these post-mining enterprises financially viable.

During the summer school, researchers and PhD students in the REXSAC and MinErAL networks will explore how communities that are heavily dependent on extractive industries in the Arctic can deal with rapid change and legacies of resource extraction, and under what circumstances it is possible for these communities to build new futures based on the redevelopment of former extraction sites and beyond extraction.

The lectures, literature review, site visits, interactions with local actors and research workshops will relate to different ways of dealing with change in mining settlements of Quebec and Labrador. They will address topics such as Indigenous rights, the design of built environments in mining settlements, the evolution of labour arrangements from company towns to modern fly-in fly-out camps, mining governance, environmental assessments, as well as impact and benefit agreements. They will also deal with closure, environmental remediation and rewilding - the practice of restoring landscapes altered by extraction through a variety of practices, nowadays required in the mining legislation of many countries. We will discuss environmental remediation as not only a matter of applied ecology or engineering, but also as a political, social, and cultural process that involves different actors valuing different things and making choices. A related topic is how remediation can be reconsidered in order to better serve communities and take into consideration their perspectives and aspirations. Another central concern is heritagization processes and repurposing projects in Arctic mining towns. We ask questions like: How have communities in the Arctic dealt with the material legacies of mining, in attempts to diversify their economies and/or in processes of transition to post-industrial futures? What lessons can be drawn from attempts to define and use abandoned mining landscapes as heritage? Whose narratives and understandings about the past come to dominate in heritage and remediation processes, and why? How can multiple and often contradicting experiences of mining be dealt with in resource communities undergoing transitions?

Other related lessons to be drawn from economic diversification and transitions to postextraction economies in the Arctic are attempts to turn former extraction settlements and sites into tourist attractions – historical mining sites but also ongoing mining operations. What are the best practices and processes? One of the goals is to open new avenues for considering mining as a process of change that can be owned and indeed used to generate legacies that contribute to the sustainability of communities and the respect of their rights.

Objectives

This summer school aims to provide keys to understand the social, economic and political issues related to mining in northern Canada, particularly in the case of towns born with mining. The objective of this project is to organize a PhD seminar and research workshop focusing on extraction-based communities in the north that are undergoing change, in particular through the processes of industrialization and deindustrialization. The project will focus on communities in Quebec and Labrador that have been subject to mining operations in the past and are currently the site of active (re)developments: Schefferville, Fermont, Labrador City and Wabush. The course and research workshop will explore how stakeholders and rights holders in these regions have dealt with industrialization and deindustrialization and what lessons can be learned from such processes for other mining communities in the Arctic and beyond. As such, this summer school offers the opportunity to explore historical and memory issues related to past mining operations, current issues having to do with the weakening or resumption of mining activity, as well as the way in which the future of these cities is approached and imagined.

Learning goals and pedagogy

The objective of the course is for PhD students from Canada and Fennoscandinavia to gain a thorough understanding of the dynamics of boom and bust in northern mining towns – why they take place, what their social, cultural and environmental consequences are and how stakeholders in the north have dealt with them. The course will explore this topic from a multidisciplinary perspective. When having completed this course, the students should have a firm knowledge about:

- characteristics of industrialization and deindustrialization processes in northern mining settlements, in the past and present;
- different explanations of why boom and bust occurs;
- the social, economic, cultural and environmental consequences of boom and busts; and
- how local residents and different stakeholders have dealt with change, and why.

The learning activities consists of lectures, fieldwork exercises, seminar discussions and reading of course literature, as well as a written assignment. Learning objectives aim at:

1) training students in social science fieldwork research by helping them to better understand and relate the points of view and interests of different actors, through a variety of conceptual tools;

2) laying the foundation for scientific collaboration in the development of a special issue of comparative review on mining cities in transition in the Canadian and Swedish contexts. Researchers from REXSAC and MinErAL and students will write co-authored articles for a special issue of *The Extractive Industries and Society*, comparing mining settlements in the Canadian and Fennoscandinavian norths.

The summer school is structured around different working sessions spread over several days, punctuated by conferences offered by researchers, field visits, discussions and roundtables aimed at understanding the viewpoints of local actors on the different transitions that their municipality and communities have undergone with regard to mining activity, past, present and future. They will address at least three questions: How to understand transition regarding boom and busts of mining activities in northern Canada? What are the municipalities' and Indigenous communities' experiences of mining cycles? What are the levers that towns and Indigenous groups use today to negotiate their relationships with mining companies?

Assessment

The evaluation of this course is based on:

- Attendance at the course and the writing of a fieldwork diary that should be based on notes from the conferences, meetings and any other contents that the student considers interesting to attach (photo, press clippings, drawings, etc.). Daily notes of 500 words per day will represent 30% of the final score.
- A final analytical report on a specific topic explored in the summer school. The text should be between 8 000 and 10 000 words that summarize the lessons learned from the conferences and meetings that will have taken place during the summer school and connect it with the pertinent readings. This will represent *70% of the final score* and should be delivered by 21st June 2019.

For undergraduate students, the evaluation will also be based on daily fieldwork notes (500 words) and a synthesis of the specific texts mentioned below (4 000-5 000 words).

Schedule

Day 1 - Sunday May 26

Arrival in Sept-Îles

17.00 Gathering Chez Edgar, 490 avenue Arnaud, Sept-Îles, Québec

Day 2 - Monday May 27

Train travel from Sept-Îles to Schefferville (departure 7.00 am)

Presentations on the train:

- Mining and indigenous communities (Thierry Rodon)
- Mining laws and indigenous rights in Canada (Sophie Thériault)
- Mining legacies in Canada and Northern Europe (Arn Keeling)
- Mining town in transitions (Albina Pashkevich, Dag Avango, Lill Rastad Björst)

Day 3 - Tuesday May 28

Schefferville

Presentation of the regional context – Jean-Sébastien Boutet

Visit of the Matimekosh Band Council

Meeting with Schefferville administrator and entrepreneurs

Day 4 - Wednesday May 29

Schefferville

Visit of the Tata Steel mine

Visit of the Kawawachikamach Band Council

Day 5 - Thursday May 30

Schefferville

Meeting with Innu and guardians of sacred sites

McGill Subarctic Research Station

Summary of the Schefferville meetings and activities – Élise Lepy

Day 6 - Friday May 31

Train travel from Schefferville to Fermont (departure 8.00 am)

Presentation of the regional context – Thierry Rodon

Visit and history of Fermont

Day 7 - Saturday June 1

Fermont

Roundtable with citizens on the boom and Fermont future

Visit of the Arcelor Mittal mine

Day 8 - Sunday June 2

Fermont / Labrador West

Meeting with Minerai de Fer Quebec

Roundtable with the USW representatives and workers

Visit of Labrador City

Day 9 - Monday June 3

Fermont / Labrador West

Roundtable with municipality council and Arcelor Mittal

Travel from Wabush to Quebec City in the evening (departure 20.30)

Day 10 - Tuesday June 4

Quebec City – Monastère des Augustines

A look back at the discussions and learning experience

Beginning of writing work for a special issue in a scientific journal

Reading list

1. Extractive industries in northern Canada and the Arctic: law, policy, governance, Indigenous rights.

These readings provide an overview of historical, social, economic and legal issues related to mining activities in northern Canada and the Arctic. They focus especially on the politics of mining in Indigenous territories, covering Indigenous relations with the mining industry (including negotiated agreements), Indigenous rights, and mining law, policy and governance with regards to Indigenous peoples.

Mandatory readings:

- Avango D., Nilsson A.E., and Roberts P. (2013). Assessing Arctic futures: voices, resources and governance. *The Polar Journal* 3(2): 431-446.
- Horowitz L.S., Keeling A., Lévesque F., Rodon T., Schott S., and Thériault S. (2018). Indigenous peoples' relationships to large-scale mining in post/colonial contexts: toward multidisciplinary comparative perspectives. *The Extractive Industries and Society* 5(3): 404-414.
- Keeling A., and Sandlos J. (2015). Introduction. In *Mining and communities in northern Canada: history, politics, and memory*. University of Calgary Press, 1-32.
- O'Faircheallaigh C. (2010). Aboriginal-mining company contractual agreements in Australia and Canada: implications for political autonomy and community development. *Canadian Journal of Development Studies* 30(1-2): 69-86.
- Papillon M., and Rodon T. (2017). Proponent-Indigenous agreements and the implementation of the right to Free, Prior and Informed Consent in Canada. *Environmental Impact Assessment Review* 62: 216-224.

Optional readings:

- Keeling A., and Sandlos J. (2016). Introduction: critical perspectives on extractive industries in northern Canada. *The Extractive Industries and Society* 3(2): 265-268.
- Kuokkanen R. (2019). At the intersection of Arctic Indigenous governance and extractive industries: a survey of three cases. *The Extractive Industries and Society* 6(1): 15-21.
- Peterson St-Laurent G., Le Billon P. (2015) Staking claims and shaking hands: impact and benefit agreements as a technology of government in the mining sector. *The Extractive Industry and Society* 2(3): 590-602.
- Rodon T. (2018). Institutional development and resource development: the case of Canada's Indigenous peoples. *Canadian Journal of Development Studies* 39(1): 119-136.
- Thériault S. (2010) Repenser les fondements du régime minier québécois au regard de l'obligation de la Couronne de consulter et d'accommoder les peuples autochtones. *McGill International Journal of Sustainable Development Law and Policy* 6(2): 219-245.

2. Mining towns: social and economic impacts.

These readings focus on the socioeconomic impacts of mining activities and the challenges of single industry towns, including economic diversification and historical and modern labour arrangements such as company towns and fly-in, fly out.

Mandatory readings:

- Boutet J.S., Keeling A., and Sandlos J. (2015). Historical perspectives on mining and the Aboriginal social economy." In Southcott C. (ed.), *Northern communities working together: the social economy of the Canadian North.* University of Toronto Press, 198-227.
- Marais L. et al. (2018). The changing nature of mining towns: reflections from Australia, Canada and South Africa. *Land Use Policy* 76: 779-788.
- Rodon T., and Lévesque F. (2015). Understanding the social and economic impacts of mining development in Inuit communities: experiences with past and present mines in Inuit Nunangat. *Northern Review* 41: 1-27.
- Vodden K., and Hall H. (2016). Long distance commuting in the mining and oil and gas sectors: implications for rural regions. *The Extractive Industries and Society* 3: 577-583.

Optional readings:

Encyclopedia of Newfoundland. Labrador Boundary Dispute. p. 216-222.

- Labeaume R. (1991). L'intervention d'une communauté locale dans l'exploration minière: un cas d'innovation sociale et économique, Fermont. In Saint-Pierre G., Gélinas G.C., and Vallée M. (eds.), Les innovations dans le monde minier québécois. Gaëtan Morin Éditeur, 175-187.
- Pressman Norman E.P., and Lander K. (1978). Resource towns as new towns. *Urban History Review* 7(1): 80-95.
- Randall J.E., Geoff Ironside R. (1996). Communities on the edge: an economic geography of resource-dependent communities in Canada. *The Canadian Geographer* 40(1):17-35.

- Ritter A.R.M. (2001). Canada: from fly-in, fly-out mining metropolis. In MacMahon G., and Remy F. (eds.), *Large mines and the community: socioeconomic and environmental effects in Latin America, Canada and Spain*. International Development Research Centre, 223-261.
- Shrimpton M., and Storey K. (1992). Fly-in mining and the future of the Canadian north. In Bray
 M., and Thomson A. (eds.), *At the end of the shift: mines and single-industry towns in northern Ontario*. Institute of Northern Ontario Research and Development, 187-208.
- Simard M. (2017). La frontière Québec-Labrador: quels effets sur le développement des ressources et des populations du Nord? VertigO: La revue électronique en sciences de *l'environnement* 17(2).

3. Mining towns: the regional context(s).

These texts examine in more details the regional context for the mining industry in Québec-Labrador, exploring the long-term relationships between communities and the industry, the impact of mining cycles, and the links between local and global economic drivers in Schefferville, Fermont and Labrador City.

Mandatory readings:

- Bradbury J.H. and St. Martin I. (1983). Winding down in a Québec mining town: a case study of Schefferville. *The Canadian Geographer* 27(2): 128-144.
- Sheppard A. (2011). Fermont: the making of a new town in the Canadian sub-Arctic. Lecture delivered on July 11, 2007, Bucarest, Romania.
- Thistle J., and Langston N. (2016). Entangled histories: iron ore mining in Canada and the United States. *The Extractive Industries and Society* 3: 269-277.

Optional readings:

- Asselin H. (2012). Plan Nord: les autochtones laissés en plan. *Recherches amérindiennes au Québec* 41(1): 37-46
- Boutet J.S. (2014). Opening Ungava to industry: a decentering approach to Indigenous history in subarctic Québec, 1937-1954. *Cultural Geographies* 21(1): 79–97.
- Bradbury J.H. (1985). The rise and fall of the « Fourth Empire of the St. Lawrence »: the Québec-Labrador iron ore mining region. Cahiers de géographie du Québec 29(78): 351-364.
- Bradbury J.H. (1984). The impact of industrial cycles in the mining sector: the case of the Quebec-Labrador region in Canada. *International Journal of Urban and Regional Research* 8: 311-331.
- Hammond, J. (2015). Gender, labour and community in a remote mining town. Keeling A., and Sandlos J., *Mining and communities in northern Canada: history, politics, and memory.* University of Calgary Press, 117-136.
- Klinck R., et al. (2015). Enabling community well-being self-monitoring in the context of mining: the Naskapi Nation of Kawawachikamach. *Engaged Scholar Journal: Community-Engaged Research, Teaching* and Learning 1(2): 114-130.

Simard M., and Brisson C. (2016). Les vulnérabilités des villes minières nordiques: le cas de Schefferville au Québec. *Organisations et territoires* 25 (1): 37-50.

4. Territory, environmental legacy, closure and remediation.

These readings examine the environmental legacy of mining activities, especially with regards to Indigenous relationships to the territory, and the challenges of closure and remediation.

Mandatory readings:

- Bainton N., and Holcombe S. (2018). A critical review of the social aspects of mine closure. *Resources Policy* 59(4): 468-478.
- Keeling A., and Sandlos J. (2017). Ghost towns and zombie mines: the historical dimensions of mine abandonment, reclamation and redevelopment in the Canadian north. In Bocking S., and Martin B. (eds.), *Ice blink: navigating northern environmental history*. University of Calgary Press, 377-420.
- Plante, S., et al. (2018). Human disturbance effects and cumulative habitat loss in endangered migratory caribou. *Biological Conservation* 224 (2018): 129-143.
- Kivinen S. (2017). Sustainable post-mining land use: are closed metal mines abandoned or reused space? *Sustainability* 9(10): 1705.

Optional reading:

- Aebischer S., Cloquet C., Carignan J., Maurice C., and Pienitz R. (2015). Disruption of the geochemical metal cycle during mining: multiple isotope studies of lake sediments from Schefferville, subarctic Québec. *Chemical Geology* 412: 167-178.
- Beckett C., and Keeling A. (2019). Rethinking remediation: mine reclamation, environmental justice, and relations of care. *Local Environment* 24(3):216-230.
- Carney, J. (2017). Mine closure without closure: Inuit of Nunavik continue to battle legacies of Asbestos Hill. Master's thesis report, Memorial University. 22p.
- Cater T., and Keeling A. (2013). "That's where our future came from": mining, landscape and memory in Rankin Inlet, Nunavut. *Etudes/Inuit/Studies* 37(2): 59-82.
- Dance A. (2015). Northern reclamation in Canada: contemporary policy and practice for new and legacy mines. *Northern Review* 41: 41-80.
- Herrmann T.M, et al. (2014). Effects of mining on reindeer/caribou populations and indigenous livelihoods: community-based monitoring by Sami reindeer herders in Sweden and First Nations in Canada. *The Polar Journal* 4(1): 28-51.
- Kivinen S., Vartiainen K., and Kumpula T. (2018). People and post-mining environments: PPGIS mapping of landscape values, knowledge needs, and future perspectives in northern Finland. Land 7(4): 151.
- Larsen, R.K., Österlin, C., and Guia, L. (2018). Do voluntary corporate actions improve cumulative effects assessment? Mining companies' performance on Sami lands.' *The Extractive Industries and Society* 5: 375-83.
- Sandlos J., and Keeling A (2016). Aboriginal communities, traditional knowledge, and the environment legacies of extractive development in Canada. *The Extractive Industries and Society* 3: 278-287.

5. Theoretical perspectives: colonial legacy, justice, refusal.

These texts are dedicated to opening up theoretical perspectives in the extractive industry literature in Canada, especially regarding the colonial legacy of mining activities, the prospects for consent and Indigenous sovereignty, and reflexivity regarding the role of social science for and beyond extractive industries.

Mandatory readings:

- Têtu P.L, and Lasserre F. Iron Ore Company (IOC) of Canada versus the Innu's: perspective of a dispute from a local lens. Forthcoming book chapter.
- Willow, A.J. (2016). Indigenous extractivism in boreal Canada: colonial legacies, contemporary struggles and sovereign futures. *Humanities* 5: 55.
- Wilson E., and Stammler F. (2015). The extractive industries and society beyond extractivism and alternative cosmologies: Arctic communities and extractive industries in uncertain times. *The Extractive Industries and Society* 3(1): 1-8.

Optional readings:

- Baker J.M., and Westman C.N. (2018). Extracting knowledge: social science, environmental impact assessment, and Indigenous consultation in the oil sands of Alberta, Canada. *The Extractive Industries and Society* 5(1): 144-53.
- Burke Wood P., and Rossiter D. (2017). The politics of refusal: Aboriginal sovereignty and the Northern Gateway pipeline. *The Canadian Geographer* 61(2): 165-177.
- Joly, T.L., Longley H., Wells C., and Gerbrandt J. (2018). Ethnographic refusal in traditional land use mapping: consultation, impact assessment, and sovereignty in the Athabasca oil sands region. *The Extractive Industries and Society* 5(2): 335-343.
- Keeling A. and Sandlos J. (2009). Environmental justice goes underground? Historical notes from Canada's mining frontier. *Environmental Justice* 2: 117-25.
- Temper L. (2018) Blocking pipelines, unsettling environmental justice: from rights of nature to responsibility to territory. *Local Environment* 24(2): 94-112.

Tuck, E. (2009) Suspending damage: a letter to communities. *Harvard Educational Review* 79. 409-28

6. Histories of northern science.

Optional readings:

Adams, W.P. (2007). McGill and Schefferville/Knob Lake. In *Trent, McGill, and the North: a story of Canada's growth as a sovereign polar nation*. Cover to Cover Publication Services.

- Doel, R.E., Wråkberg U., and Zeller S. (2014). Science, environment, and the New Arctic. *Journal of Historical Geography* 44: 2-14.
- Evenden, M.D.(2006). Harold Innis, the Arctic Survey, and the politics of social science during the Second World War. *Canadian Historical Review* 79(1): 36–67.

Stuhl, A. (2019). Science and Indigenous Knowledge in land claims settlements: negotiating the Inuvaluit Final Agreement, 1977-1978. In Bocking S., and Heidt D. (eds.), *Cold science: environmental knowledge and the North American Arctic during the Cold War*. Routledge, 153-174.