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### Original article

# Beyond extractivism and alternative cosmologies: Arctic communities and extractive industries in uncertain times



## Emma Wilson\*, Florian Stammler

Director, ECW Energy Ltd., and Associate of the Scott Polar Research Institute, University of Cambridge

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#### ABSTRACT

The Arctic remains of great interest for extractive industry development, despite fluctuating mineral and hydrocarbon prices, and the technological and political challenges of accessing these resources. The articles in this special section explore the realities of living close to extractive industries in the Arctic; the expectations surrounding extractive projects; the nature of local and distributed benefits; and the extent to which local knowledge is incorporated into public debates. In this introduction, we consider how an 'extractivist' logic can stifle other ways for local communities to imagine the future, contrasting this with local perspectives based on sustainability and co-existence with nature. Where industrial activity takes place, local involvement in shaping an industry's 'social licence to operate' offers a counterbalance to an 'extractivist' imperative, by focusing more on equitable benefit sharing and protection of local livelihoods and the environment. We conclude that rights holders and others directly affected by industry operations can use their own knowledge to ensure that decisions are sensitive to longer-term sustainability risks, and that alternative development options are adequately considered. An empowered local civil society also has an important role in ensuring extractive industry operations are environmentally sound and compatible with existing local livelihoods.

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#### 1. Introduction

The Arctic remains a region of particular interest for extractive industries, despite the collapse in the price of oil from 2014 and ongoing fluctuations in the price of minerals, and despite the technological and political challenges of extracting minerals and hydrocarbons from Arctic environments. The increased potential for renewable energy industries is accompanied by increased demand for minerals that are required by those industries (notably the rare earth metals). Yet the inconsistent nature of oil and mineral markets itself makes future planning on the basis of natural resource development very difficult. Nonetheless, in many societies the desire to develop extractive industries is a high priority and is seen as a guarantee of government revenues and wellbeing. The prioritising of extractive modes of resource management, including oil, gas, mining, forestry and fisheries, within the political economy and development planning has been termed 'extractivism' and is also associated with colonial and neocolonial policies of appropriation (Acosta, 2013; Stammler and Ivanova, this section). At the local level, the high hopes of extractive

The so-called 'resource curse' is a well-known phenomenon, whereby the exploitation of natural resource wealth does not necessarily translate into wellbeing for local populations, due to mismanagement of resource revenues; distortion of the overall economy through currency rate fluctuations; and power asymmetries that are accentuated by resource development (Auty, 1993; Soros, 2007; Gilberthorpe and Hilson, 2014). Yet even before extractive projects start up, the very prospect of a mine or hydrocarbon development can transform the way a local community thinks about its future, often overshadowing alternative options (Nygaard, this section), while a failed extractive industry development or 'bust' cycle can also lead to a deep disappointment that overpowers efforts to seek alternative development options (Young, this section). We can thus talk about how an 'extractivist logic' might stifle other ways of imagining the future. The extractivist logic can be contrasted with indigenous cosmologies that are based on co-existence with the

E-mail address: emma.wilson@ecwenergy.com (F. Stammler).

industry development are often associated with employment for local people in economically weak remote regions. In some cases these hopes are satisfied and communities are able to build a thriving economy on the basis of extractive industry development. Yet expectations tend to be the same, no matter how many times such expectations have been disappointed or opportunities wasted in other regions in the past.

<sup>\*</sup> Corresponding author.

natural environment and are frequently in opposition to extractive industry activity (Stammler and Ivanova, this section). 'Extractivist' narratives or 'storylines' played out in public can also encourage strong oppositional narratives suggestive of doom and destruction (Bjorst, this section). If a decision is made to go ahead with an extractive industry project, local people are frequently not directly involved in that decision, but will want to influence it one way or another (Wilson, this section). Local influence starts with the inclusion of local voices in debates, documentation and decisionmaking around an extractive activity (Dale, this section; Nygaard, this section; Hansen et al., this section). Saxinger (this section) also reminds us that not all 'local voices' belong to the local and indigenous populations, an example being the long-distance commuting (LDC) workers who divide their lives between two 'localities' thousands of miles apart. While being a part of the 'extractivist' paradigm through employment, they are also dependent on a company to grant them respect and ensure their safety and wellbeing at work.

It is helpful to consider a company or industry's 'social licence to operate' from the perspective of local society as a counterbalance to an 'extractivist' imperative. A social licence is often based on a desire for sustainable co-existence: ensuring that benefits from a development are shared equitably with the local population and that local livelihoods and the environment are not damaged in the process. Critics of the predominant 'social licence' literature have highlighted the fact that the concept was invented by industry; analysis often takes the company perspective; and that industry has created tools for trying to obtain or maintain a social licence (Syn, 2014). This might be perceived as an extension of the 'extractivist logic', as the tools tend to derive from corporate management systems and not from local cosmologies or norms, while the goal is to legitimise extractive activities. Some studies have tried to counter this by exploring community perspectives and encouraging use of local cultural norms and traditional decision-making processes in the implementation of company social policy (e.g. Wilson and Blackmore,

Yet in practice a social licence does not depend solely on company approaches and tools. It may be influenced by the dominant governance regime, legal frameworks for land rights and decision making, the extent to which customary law and indigenous rights are respected, institutions of participatory democracy, NGO campaigns, and existing levels of well-being within a community. A key factor is the empowerment of local communities, and the extent to which people understand the level of power that they can exert over a project, are informed about the industrial activities, and can articulate their wants, needs and expectations (Syn, 2014; Nygaard, this section; Wilson, this section). Moreover, while local communities themselves may not talk about a social licence (in the same way as they may not talk about corporate social responsibility), the essence of the concept is fundamental to them—do they accept a project or not and can they have that project on their own terms? While there might still be cases where a social licence is in place when people are unhappy with an industry, yet tacitly accept it (Wilson, this section), there are other examples of where communities have taken control and shaped the social licence to reflect their own needs and expectations (Gunningham et al., 2004; Nygaard, this section). As Syn (2014:320) suggests, 'we now talk about a social license because previously marginalized people are finally able to show that they will no longer stand by quietly while their homes and livelihoods are destroyed'.

The advances over the past decade in refining good practice guidelines, articulating ethical values and improving implementation in practice suggest that industry is now starting to understand that sometimes a different type of world view needs

to be seen in balance to their own. For example, at the Arctic Energy Summit in Alaska from 28 to 20 September 2015, 1 most speeches by industry and government incorporated an upfront acknowledgement that all development happens on the homeland of native Alaskans, and that all parties respect local worldviews and livelihoods. While cynics might talk of 'lip service', we would suggest that even the fact that companies feel the need to acknowledge such alternative worldviews as valid and valuable is already evidence of progress. On the other hand, the Alaskan example also raises the question of the resilience of indigenous worldviews in a world where Alaskan native corporations have turnovers of billions of dollars. In the Russian context, Stammler and Ivanova (this section) consider whether those indigenous groups who internalise the utilitarian approach to resource development are the most successful.

This special section brings together papers to allow a comparison of how extractive industries affect local ideas and development opportunities in different regions united by a northern environment, to explore what we can learn from these insights for broader debates on extractive industries and local development. In particular we consider what anthropologists and social scientists can contribute to these debates, through in-depth consideration of local voices and contexts, political processes and discourses. While this is an academic publication, the authors are conscious of the importance of including non-academic voices in these debates, and several papers explicitly emphasise and explore this aspect. In Section 2 we consider the current state of energy and mineral markets, questioning whether the unpredictable and volatile nature of current markets is a reliable foundation for constructing development plans. In Section 3 we consider the importance of understanding the local context of extractive industry projects and consider how the field has evolved over the past 10 years in this respect. In Section 4 we consider each of the papers in this special section, considering in particular the linking themes of 'extractivism', 'social licence' and local knowledge and empowerment. Section 5 offers some concluding thoughts.

#### 2. Uncertain times for the extractive industries in the Arctic

Governments and corporations continue to pursue opportunities for opening up the Arctic to more extractive industry development. However, commodity price volatility and other political, economic and governance factors mean that extractive industries are becoming a less certain foundation for sustainable long-term socio-economic development. Despite strong opposition from environmentalists, in August 2015 the US government gave Shell the final permit required to drill for oil off the northwest coast of Alaska.<sup>2</sup> Yet Shell subsequently abandoned Arctic drilling after finding disappointing results from a well in the Chukchi Sea,<sup>3</sup> citing the high costs of the project and the unpredictable regulatory environment as factors in that decision.<sup>4</sup> At the September 2015 Arctic Energy Summit in Alaska, Shell's announcement resulted in a subdued mood, as delegates apologized for speeches they had prepared that started by outlining the huge potential for developing one of the last energy frontiers and how this meant Alaska could secure a future long

<sup>&</sup>lt;sup>1</sup> This congress was attended by co-author Stammler. See also http://cryopolitics.com/2015/09/29/mood-at-arctic-energy-summit-subdued-following-shells-with-drawal/

http://www.usatoday.com/story/money/business/2015/08/17/shell-arctic-alaska/31890239/.

<sup>&</sup>lt;sup>3</sup> http://www.bbc.com/news/business-34377434.

<sup>&</sup>lt;sup>4</sup> http://barentsobserver.com/en/energy/2015/09/shell-abandons-oil-exploration-arctic-ocean-28-09.

after production from Prudhoe Bay had peaked. Shortly afterwards, Statoil also withdrew from Alaska. The news from Canada is no more positive for the industry. In August 2015, the Minister of Finance of Canada's Alberta Province indicated that the province's budget was facing a deficit of up to \$6.5-billion (Canadian), while oil and gas investment is expected to fall more than 30% in 2015: oil rig activity declined almost 50% and unemployment increased to 6% in the first half of the year (Jones and Lewis, 2015; Giovannetti, 2015; Alberta Treasury Board and Finance, 2015).

In Russia, oil and gas remain the country's main source of income. Russia's oil giants Rosneft and Gazprom are fighting over the rights to operate the Murmanskoye field in the Barents Sea,<sup>6</sup> while Gazprom is building a new Arctic oil terminal in the Ob Bay, Western Siberia.<sup>7</sup> At the same time, the much-awaited Shtokman offshore gas project in the Barents Sea has yet to materialise, and Total has given its share in the project to Gazprom.<sup>8</sup> Moreover, around 68% of the technical equipment required for offshore oil and gas exploration, such as drilling rigs and spare parts, is currently subject to international sanctions and Russian companies are unable to access it.9 Oil exploration continues in Iceland's offshore zones in spite of the oil price crash.<sup>10</sup> However, in Greenland, three major oil companies returned their exploration licences in January 2015. In the same month London Mining iron ore company went bankrupt and was taken over by the Chinese company General Nice. 11 NunaMinerals, a partly governmentowned mineral exploration company and Greenland's largest was saved from bankruptcy by British firm Greenland Minerals Management, who took over the government's one third share.<sup>12</sup> Greenland's last producing mine—the Nalunag goldmine in Southern Greenland—closed in 2013 following a drop in the price of gold.<sup>13</sup> In 2014 Greenland relaxed a moratorium on uranium mining to encourage more development of its minerals sector, yet uranium continues to be a controversial topic in politics and has led to public protest (Bjorst, this volume).

In Norway, Statoil and others have cut more than 35,000 jobs in the oil and gas sector since 2014, a major factor in a 2% increase in unemployment in the country.¹⁴ North Energy, the only oil company based in Northern Norway posted a loss of NOK 23 million (€3.7 million) for the second quarter of 2015 and has recently cut its staff almost in half and moved to Oslo in order to cut costs, creating job losses in northern towns, notably Alta. Meanwhile the landmark Eni project off the coast of Hammerfest has experienced two years of delays in starting production.¹⁵ In the mining sector, with a long-term drop in the price of iron ore, Sydvaranger, which is operating a mine in Kirkenes, has been declared bankrupt.¹⁶ In Norway, there are several cases of mining

companies going bankrupt and abandoning a site before recultivation has taken place.<sup>17</sup> Simultaneously, in northern Sweden with its century-long mining history, the historical low in prices is taking its toll. Northland Resources, which had been running an iron-ore project close to the Swedish-Finnish border in Pajala (population 2000), declared bankruptcy in December 2014, terminating almost 800 jobs. 18 The company had also planned to produce iron ore from the sister-deposit on the Finnish side of the border in Kolari. There, ore had previously been extracted until 1998, when the Hannukainen mine closed, also due to low prices. The company had been planning to re-open in 2016 and in 2014 was still optimistic that this would happen (Van Dam et al., 2014). Thus, the population in this area has long been aware of the volatility of the extractive industries, while tourism and reindeer herding on the other hand have proven themselves to be relatively stable alternatives (Heikkinen et al., 2013).

These and similar developments elsewhere indicate that societies cannot necessarily rely on extractive industries as a secure foundation for future development. A price drop can very quickly deter investors, who had been working hard to engage the government only the day before. Equally, an upsurge in commodity prices can mean that projects that had been discarded are suddenly back on the table, as has happened with both the Hannukainen and Sydvaranger mines.<sup>19</sup>

#### 3. Understanding the local context: an evolving field

It is important to understand how these large-scale external factors such as price fluctuations, bankruptcy, or conflict play out in local communities, particularly in relation to decisions made that affect local livelihoods and the ways that people think about and plan for the future. Equally important are the local level influences, such as political structures, power relations, sociocultural norms, and historical expectations about industrial development. In 2006 we co-edited a special edition of Sibirica the interdisciplinary journal of Siberian Studies, on extractive industries, communities and the state in the Russian North and Far East (Stammler and Wilson, 2006). We argued that understanding the local context is critical to a full appreciation of the extractive industries and society, and that anthropologists are well-placed to promote and enhance this understanding. Learning from the perspectives of local societies is something that all stakeholders can benefit from – industry, government, civil society, communities and researchers - and greater knowledge and mutual understanding can enhance trust. We argued that 'collective agency' - or the capacity of stakeholders to work together for the common good - is critical for stakeholders to ensure a mutually beneficial future (ibid, p.8).

Much has changed in the decade that has passed since we worked on that special edition. These changes in the sphere of relations between industry, authorities and the people living in the places of extraction can be summarised as being more rights-oriented, more regulated, more organised, more socially aware, less spontaneous and ad-hoc. Climate change has given way to extractive industries as a major research topic in the Arctic, with considerable financial resources being allocated towards better understanding the challenges of these industries in this particular

<sup>5</sup> See: https://www.washingtonpost.com/news/energy-environment/wp/2015/ 11/17/following-in-shells-footsteps-oil-major-statoil-will-also-exit-the-alaskanarctic/.

<sup>6</sup> http://barentsobserver.com/en/energy/2015/09/giants-fight-over-murmans-koye-25-09.

<sup>&</sup>lt;sup>7</sup> See: http://barentsobserver.com/en/energy/2015/10/gazprom-prepares-new-arctic-terminal-05-10.

<sup>&</sup>lt;sup>8</sup> See: http://sputniknews.com/business/20150624/1023774908.html.

<sup>&</sup>lt;sup>9</sup> http://barentsobserver.com/en/energy/2015/09/offshore-oil-feels-pain-spare-parts-come-short-18-09.

<sup>10</sup> https://www.americansecurityproject.org/iceland-like-all-arctic-nations-is-drilling-for-oil/.

<sup>11</sup> http://goxi.org/profiles/blogs/what-role-will-energy-and-minerals-play-in-the-future-of.

http://arcticjournal.com/oil-minerals/1987/nothing-or-nothing.

<sup>13</sup> http://www.worldwatch-europe.org/node/297.

<sup>&</sup>lt;sup>14</sup> http://www.upstreamonline.com/live/1417968/norway-government-on-spot-over-statoil.

<sup>15</sup> http://petroglobalnews.com/2015/08/eni-expects-first-oil-from-norway-arctic-field-within-weeks/.

<sup>&</sup>lt;sup>16</sup> http://barentsobserver.com/en/business/2015/09/sydvaranger-brink-bank-ruptcy-23-09.

<sup>&</sup>lt;sup>17</sup> http://goxi.org/profiles/blogs/landmark-decision-by-sami-people-to-say-no-to-gold-mine-in-norway.

<sup>18</sup> http://www.minefocus.com/2014/12/northland-resources-goes-bankrupt/.

<sup>&</sup>lt;sup>19</sup> http://www.sydvarangergruve.no/index.php?option=com\_content&view=article&id=17&Itemid=121&lang=en.

region (Stammler, 2014). There is considerable interest in aspects of governance, including participatory governance institutions, and in the relations between industry and local societies. In the past ten years, discussions on ethics in the context of extractive industry development have become more elaborate and informed (Lang and Mokrani, 2013; Calain, 2012; Moore and Velasquez, 2012; Fox, 2002), a tendency that we also see in increased activity in the corporate and political arena in developing ethical guidelines for extractive industries (IFC, 2012; World Bank, 2014; OECD, 2015). Since the adoption of the United Nations Declaration on the Rights of Indigenous Peoples in 2007, there has been much greater discussion of indigenous rights and in particular the notion of 'free, prior and informed consent' and increased interest in questions of how and to what extent local communities (indigenous or nonindigenous) can say 'yes' or 'no' to a project. The United Nations Guiding Principles on Business and Human Rights (UNGPs) (adopted in 2011) have shifted the discourse on industrycommunity relations to one that is much more overtly focused on human rights. The UNGPs make little direct reference to indigenous peoples' rights, but as a framework document, they make reference to 'other UN documents' that need to be adhered

In 2006, we called for dialogue between stakeholders to be 'meaningful' (Stammler and Wilson, 2006, p. 29) (see also the Ilebts Declaration, 2007). We find that in 2014 and 2015 considerable attention is being paid to what exactly is meant by 'meaningful' stakeholder engagement and consultation, with greater efforts to measure this (Wilson et al., forthcoming; OECD, 2015; BIC 2014; World Bank, 2014). More specifically for our focus region, the Arctic Council has played an increasingly active role in trying to create assessments of best practice and frameworks for better practice of the industry in the Arctic. The major oil and gas assessment undertaken for publication in 2007 was delayed due to its holistic approach and its political complexity (AMAP, 2010). The EU commissioned a general assessment of development for the Arctic, which contains a chapter each on oil and gas and on mining. In the past decade, industry has made great progress on systems and procedures for environmental protection and management of social issues. In 2006 when we published our last special edition, for example, hardly any Russian companies had published a sustainability report. Now, almost all of them do, 20 while WWF has created an environmental responsibility index of extractive companies in Russia.<sup>21</sup> Yet it is well acknowledged that social issues remain poorly understood and implementation remains patchy in the extractive industries as a whole. Of course social issues have at their heart key environmental concerns such as the integrity of reindeer pastures and marine environments, and social aspects of environmental issues tend to be less well understood than technological solutions to environmental challenges. Moreover, while the larger multinational companies now have the policies and the budgets in place to address these issues, attention is increasingly being paid to contractors, subcontractors and junior companies who may be in a different position from the majors, with less experience, money and skills, but who often play a critical role in a project where it is essential to follow global standards (Wilson and Kuszewski, 2011; IFC, 2014).

The papers gathered in this special section to a greater or lesser degree address the following set of questions: what are the current and possible social and cultural benefits of such development for local residents (and others, including mobile labour forces), and at

what social costs does this development take place? What are the local coping strategies of people who have to bear these costs? How do the involved parties negotiate decisions for or against extractive industrial development? In which ways do an extractivist logic and indigenous cosmologies co-exist in extractive industry areas? How do different states in the Arctic approach their social responsibilities in relation to extractive industries? In a world increasingly framed in terms of risk and security of supply. what place is there for the notion of 'sustainable development'? Is there a fruitful common ground where government policies, corporate social responsibility and local expectations complement each other for sustainable development? How do company-driven standards on social performance and companies' perceptions of how to secure a 'social licence to operate' compare with the perceptions of local communities themselves and their efforts to proactively shape the social licence to operate?

#### 4. Articles in this special section

This collection of articles offers different perspectives from anthropology and other social sciences on the extractive industries in the Arctic and how they affect people's everyday lives and the natural environments in which they live. The articles are all based in regions perceived as harsh and remote northern environments but these are perhaps not so harsh and remote as external observers may think, and indeed represent the everyday and ordinary to those living and/or working there. Several of the articles look in particular at issues relating to local indigenous populations—some of whom are not officially recognised as such. Many of the articles reflect on the instability of extractive industries as a foundation for social development in the long term, from a familiar boom and bust scenario in Northern Canada described in Young's article; to Norway's 'shifting priorities' between hydrocarbon and mining development referred to in Nygaard's article; to the way that companies come and go from Greenland depending on whether the price of commodities means they can afford to explore in such a geographically challenging region, a situation that provides a backdrop to the articles by Bjorst and Hansen et al.

One theme cutting across the articles is the relationship between different regulatory regimes starting from international law, corporate policies, national legislation all the way to regional and local regulative practice. How do these regulatory regimes in Arctic extractive industries incorporate local knowledge and voices? Authors in this special section answer this question differently, with findings ranging from almost complete ignorance, in Stammler and Ivanova's case study of Kamchatka in the Russian Far East, to Nygaard's case where local voices ruled out industrial activity even before the impact assessment stage in Norway's northern Finnmark region. The articles in this special section are particularly strong in illustrating the ways that local voices are (or are not) incorporated into important debates that affect decisions made on extractive industry development. In many cases there is too little space for local voices to be heard, or local knowledge is considered to be less valuable than scientific knowledge, even if the latter is inadequate to address a particular challenge. Knowledge and power are inextricably linked in these debates and power tends to be centralised in government organs, which have political power, and in corporate entities, which have access to money and legal expertise.

Brigt Dale's paper explores the process of making political decisions relating to resource extraction in Norway, through analysis of the way that the Integrated Management Plan for the Barents and Lofoten Seas was revised prior to 2011. Dale uses the Foucauldian concept of governmentality to suggest that the use of a technical and scientific approach to political decision-making

http://www.lukoil.com/static\_6\_5id\_2113\_.html; http://www.gazprom.com/nature/environmental-reports/; http://www.rosneft.com/Development/reports/; http://www.bashneft.com/shareholders\_and\_investors/report/.

<sup>21</sup> http://www.wwf.ru/resources/publ/book/eng/972.

tends to limit opportunities for the full utilisation of local knowledge (which was incorporated into the consultation process but not into the final report). As such, a process of governing resources becomes one of governing mentalities and actions. The management plan appeared to be aimed not simply and broadly at managing natural resources, but more specifically at establishing the feasibility of extracting oil and gas in the area. The knowledge/ power nexus described is one where important decision-makers such as ministers support the production of scientific knowledge and the imperatives of the market as the basis for decision-making. In doing so they decide what type of knowledge is to be taken seriously - i.e. scientific knowledge - and thus exclude nonscientific knowledge from the debates. Even though the revised plan led to a moratorium on further oil exploration in the area, the extractivist logic nonetheless predominates in debates and leaves little space for the consideration of alternative ways of assessing the particular risks under discussion and more broadly of imagining the future. What looks like a victory against extractive industries (moratorium on drilling in the area), is in fact mostly a decision in favour of extracting a different resource with a greater historical meaning (fish). In other words, it boils down to 'oil versus fish' (Blanchard 2013). Moreover, scientific knowledge - and only that - is used to prove why extracting one resource is more favourable than the other.

In her paper on mining in the Finnmark region of northern Norway, Vigdis Nygaard considers how national regulation affects to what extent the interests of the indigenous Sami people are taken into account in decision-making on new mining projects. She observes that a focus on petroleum investment from the 1970s in Norway reduced government interest in mineral extraction. though interest is now increasing again. Nygaard considers how Sami institutions have developed along with the legal framework to provide greater support for Sami involvement in decision making on extractive industry development. However, much work remains to be done, and the Norwegian legislative framework still fails fully to reflect the principles inherent in the ILO Convention 169 which Norway ratified in 1990, while the Mineral Act of 2009 has not yet been approved by the Sami Parliament. Nygaard compares two cases of mining decisions in Finnmark where traditional Sami resource activities - notably reindeer herding were a major part of discussions. In Kautokeino, the local municipality refused to allow an environmental impact assessment to go ahead, preferring instead to ensure protection of the reindeer herding industry in the region—a decision that was the first of its kind in Norway. In a similar Finnmark case, in Kvalsund, the municipality approved a mining project, even though there was opposition from traditional Sámi resource users, leading Nygaard to conclude that the Norwegian legal framework needs strengthening and clarifying in regard to Sámi rights.

Anne Merrild Hansen, Frank Vanclay, Peter Croal and Anna-Sofie Skjervedal consider how planning is taking place for the expansion of the extractive industries in Greenland, observing that interest remains high despite the recent commodity price drops. Among local people, these plans for industrial development offer high hopes of future benefits, but also considerable uncertainty about economic feasibility, and anxiety about social risks and the potential effects of these on the way of life of the indigenous population. The authors argue that effective identification and management of social impacts is essential. They analyse the regulatory tools used to address and manage social issues in the approval of new extractive projects in Greenland. These include social impact assessment, impact benefit agreements and public participation. They observe that a particular concern is the lack of public trust in the capacity of the Government of Greenland to protect local values. They argue that that social impact assessment is needed, not only at the project level, but also at the policy level carried out by or on behalf of the government and prior to project planning. While strategic environmental assessment (SEA) is a tool already used in Greenland in relation to extractive industry planning, social issues are rarely addressed within this framework. They suggest using SEA more as a tool for public debate and a platform for mapping both social and environmental vulnerabilities and risks. They also advocate for the use of free, prior and informed consent, which is an approach contested by some in Greenland due to the fact of indigenous majority rule.

In her paper on uranium mining in Greenland, Lill Rastad Bjorst focuses on the 'storylines' employed by different stakeholder groups in interpreting the reality of what is happening in Greenland. Uranium as a resource has the power to create considerable political debate at the local, regional and global level. In the context of a particular mine in southern Greenland and the neighbouring community of Narsaq, Bjorst reflects on how different storylines tend to form extreme positions, and considers how they affect decision-making in practice. Many key players - including the government of Greenland, the local municipality and the company that is developing the mine - promote the 'frontier' storyline of saving the community and the country through mineral resource development. The company itself claims it wants to mine not 'in' the local community but 'for' the local community (as a way of saving it). The logic is that mining equates to jobs which means a sustainable economy and ultimately independence for Greenland. The symbolic power of extractive industries as having 'nation-building' potential appears to remain strong despite the downturn in oil and mineral prices and prospects. On the other hand, NGO storylines tend to focus on uranium mining as a destroyer of the local community and nature. with concerns around radioactive dust and other environmental impacts leading to mining being termed 'criminal' and 'insane'. Bjorst suggests that language has the capacity to influence political positions and alter the balance of power between stakeholder groups, which can result in political conflict. A more moderate line may be emerging, as the current ruling party acknowledges the need to support other industries, although significant progress in this direction is yet to be seen.

Young's article on Inuvik in Canada's North-West Territories reminds us that regardless of carefully negotiated benefits, extractive industries often come with immense social costs for certain socially disempowered local residents, such as the hard-tohouse (HtH) population. Housing is an aspect of local life that is often neglected or poorly considered in economic and social impact assessments, partly because it can be difficult to attribute impacts from a particular project or activity. This is in contrast to evidence from many places across the circumpolar Arctic of the tremendous effect that industrial development has on housing and real estate prices (e.g. Hovelsrud and Smit, 2010, 29–31). Such price increases due to the influx of industry into small settlements often make housing unaffordable for local people. Young reflects on the long-term cumulative effects of the oil and gas boom in Inuvik, combined with the impact of colonial policies, and efforts to establish a strategic base for the Canadian government. In the 1970s the social issues that were undoubtedly exacerbated by Inuvik's early oil and gas boom were noted in the landmark Berger Report, and included increases in crime, addictions, prostitution, housing shortages and welfare dependency (Berger, 1977). The period that followed that boom, after a drop in the price of commodities, revealed that the government and the community had been unprepared for the exit of the industry. No strategies or safety nets had been set up and advance planning had been inadequate. A focus on the use of migrant labour (which also exacerbated housing challenges) had also failed to build local capacities. Young's article analyses the perceptions of community groups, social service providers and the homeless on what is needed to address homelessness and closely related issues of alcoholism in post-industry communities, once significant economic players have exited the community.

In her article on long-distance commuting (LDC) workers in the Russian North, Gertrude Saxinger shows how notions of responsibility extend far beyond the areas of extraction, as the Arctic 'lures in' large numbers of mobile workers, whose lives are deeply affected by working on Arctic deposits and commuting there from, more southern regions. Saxinger challenges the notion of 'local', drawing attention to the lives and perspectives of 'mobile and multi-local' LDC workers engaged on oil and gas projects in the Russian North. Saxinger observes that the LDC model is becoming more common as governments shift away from earlier models of the 'mono-industry town'—a shift that has been taking place at different rates in different Arctic countries. At the same time, she notes that the downturn in the oil sector from 2014 onwards, along with the devaluation of the rouble, have meant some projects have been scrapped or put on hold, while short-term contracts are becoming increasingly common, resulting in an increasingly insecure job market in the industry and a greater need to understand and consider the wellbeing of LDC workers. The article discusses the notion of 'normality' as it explores how these workers negotiate realms of home and work, which are emotionally and geographically distant, and yet both play a significant and meaningful role in their lives. Saxinger argues for the inclusion of LDC workers' own views in discussions on the management of long-distance commuting as a workforce strategy, if the use of LDC labour is to be enhanced as a practice in the future. The LCD workers themselves want to be seen as valid partners in discussions, as a 'normal' and 'non-deviant' work-

Florian Stammler and Aytalina Ivanova's contribution compares three cases from the Russian North to identify principles that determine how an 'extractivist' logic meets local and indigenous ways of relating to the environment. In all these cases 'extractivism' (Acosta, 2013) is based on the utilitarian logic that the environment has to be made useful for people, through the extraction of resources for the purposes of development, defined by the income going into tax authorities' budgets and the profit of companies. This can only be achieved by employing a management approach instead of a partnership approach. Management itself, however, has been characterised as 'rooted in the political and economic context of capitalist resource extraction' (Nadasdy, 2007, 223). The authors' legal anthropological field material shows that while in all three of their cases (two in Kamchatka and one in the Nenets Autonomous Okrug) this utilitarian logic prevails, the niche that is left for a relationship to the environment based on exchange and partnership differs. Their analysis suggests how coexistence of the industry and local livelihoods is negotiated between laws, regulatory regimes outside the law and ad-hoc negotiations, revealing three types of practice that they call coexistence, confrontation and co-ignorance. They conclude that, unfortunately but realistically in line with Nadasdy (ibid), those local people who have negotiated the best deal for coexistence with industry and authorities are those who have most embraced the utilitarian logic of extractivism and have agreed to leave their partnership approach to the environment in a marginalised niche. Those who do not readily accept the superiority of the utilitarian approach end up in confrontation or in 'co-ignorance' with the more powerful actors from the authorities and industry.

Emma Wilson compares two case studies from contrasting oilproducing regions of Russia in order to explore how the oil industry's 'social licence to operate' is established and played out in that country. The 'social licence' concept has not been explored in depth in the Russian context, partly because Russian civil society is perceived as weak. However, as Wilson illustrates, there is evidence of proactive civil society engagement in Russia having a positive impact on oil industry practice in both Sakhalin Island and the Komi Republic. Wilson concludes that a social licence is influenced by local expectations and historical experience in particular socio-cultural and political contexts; the willingness of all parties, including government, to engage in constructive dialogue; the ability of industry proponents to understand local needs and culture; the ability of local stakeholders to actively shape relations and outcomes to reflect their own values and expectations: and the extent to which local civil society is internationally networked. In some cases – such as Usinsk District of the Komi Republic – a social licence may be in place where trust relations do not exist between industry, government and the local communities living close to the oil sites. This is partly because the 'social licence' has been in place since the Soviet era and partly because decisions are made in the oil capital of the region, Usinsk, where the population has a high proportion of incomers and has experienced many benefits from the industry. A nascent opposition movement has emerged in a neighbouring district where the oil industry is less well established. This leads to the conclusion that a focus on the 'social licence' alone may be only partially useful, both analytically and in practice, as a way to understand local perspectives and define industry's responsibilities towards society.

#### 5. Conclusion

The articles in this special section provide evidence of the many factors that need to 'work out' so that the potential of the extractive industries to generate wealth and a higher standard of living can outweigh its possible adverse effects. The benefits of these industries can be seen in Arctic cities such as Usinsk, or the distant towns that are home to the many long distance commuting workers in Russia, as Wilson and Saxinger's articles suggest. Local expectations around potential extractive industry development are often based on hopes for such economic benefits, to the extent that other possibly more sustainable options may not be granted adequate consideration. Yet, significant external factors such as the price of oil and minerals cannot be controlled by local communities or even national governments, and as Young's article illustrates, these factors might affect a community's ability to thrive and provide support to its most vulnerable residents in the longer term. Understanding the full range of potential and risk associated with extractive industries is important for communities as they plan for the future and make critical decisions on whether or not to opt for extractive industry development, as the communities in Nygaard's article have discovered.

Understanding the local context and how an intervention however well-intentioned, however long-term or successful might affect a local community, is important for industry and government in their planning processes. To do that, it is important to engage with local knowledge, including local 'non-extractivist' perspectives. The Integrated Management Plan for the Lofoten Sea discussed by Dale in this special section is an example of a government management tool that ostensibly seeks to consider all aspects of resource development, and yet it failed in several respects to be inclusive and objective, revealing a bias towards scientific knowledge and an 'extractivist' mentality, while also failing to meaningfully include local knowledge in the final report. In our 2006 journal issue, one paper by Spiridonov (2006) argued for the greater use of strategic environmental assessment (SEA) as a tool for looking at the whole range of resources in a particular region from the start. In this special section, Hansen et al. argue for greater use of SEA as a tool for engaging the public and stimulating public debate. SEA provides governments with the opportunity to study all the options not limited to extractive industries, and not only in terms of the economic revenue or benefit. Knowing other local values and goals that go beyond an 'extractivist' mindset requires in-depth research and being familiar with the history of places, societies and cultures. This is a sphere where anthropologists and other social scientists can contribute, as we have argued before, particularly by ensuring the meaningful incorporation and fair consideration of local knowledge and voices (Stammler and Wilson, 2006).

Nygaard's Kautokeino case suggests that more thought needs to be put into which areas to set aside from extractive industry activity in the long term interests of local society and traditional livelihoods, so as to avoid repeated conflicts and a long-term sense of insecurity about the future. Similarly there have been calls for Greenland to consider making a conscious decision not to licence out areas of offshore oil and gas to exploration in the East which border a vast nature reserve and are very far from port facilities and potential oil spill response (Wilson, 2015). In such cases this presupposes an important role for government and local populations to have a public debate about these issues before companies are brought in to tender for exploration licences. This has been done before, for example in relation to the Hannukainen mine in northern Finland around mining, tourism and reindeer herding (Heikkinen et al., 2013).

Companies have made progress in the past decade in immersing themselves in the local conditions and understanding the local context of where they are operating. There is a greater awareness that going into the field helps in making the right kinds of decisions—not only for maintaining a social licence but also for risk management in business and for meeting sustainability goals. This kind of engagement is frequently cut back when finances are tight, and companies shift to reliance on the services of consultants, thus 'outsourcing' their local involvement at key stages of a project, such as impact assessment. This kind of approach misses opportunities for increasing the company's understanding of the local context and building strong trust relations with communities. Saving money at the expense of building local relationships and ensuring healthy communities is likely to be a false economy in the long term. This is why efforts to understand what constitutes a social licence, and to establish principles and practices of inclusive dialogue, meaningful community engagement and consultation, and to measure their success, are important developments in corporate policy and international good practice standards.

Companies frequently wish to systematise local contextual detail so that it can be translated into a procedure and applied, preferably globally across all their operations. This can enhance efficiency and can overcome a lack of understanding and skills among company staff. However, it is less effective when it comes to the contextual specifics of a local society. A key insight that anthropologists encounter every day is that relationship building depends on individuals. It is all about different people and different characters. Thus the success or failure of industry-community relations and the building of a social licence to operate depend on the specific individual or set of individuals who make decisions and the particular relationships between individuals. Merely creating a system or procedure is an inadequate way to institutionalise 'good neighbour' relations. Continuity of personnel in company-community relation-building is essential, along with the hiring of local people and other experts who have a deep knowledge of local communities, and avoiding one-off consultancies for community engagement.

At the same time, local and indigenous peoples need to better understand the 'extractivist' world view in order to operate as equal and fair interlocutors round the decision-making table, as Stammler and Ivanova discuss in their article. Yet some indigenous representatives have noticed and regretted that this also means partially at least internalising that worldview at the expense of

being close with one's own cosmology that is based on exchange partnerships with the living environment. It is in this latter sphere that the government and industry themselves also need to learn much more about how people feel and how significant local land use is Nadasdy (2007, 2011),) would argue that assuming this as a possibility is not realistic. The power relations in the world today are too well established and the rules of indigenous livelihoods are not those of maximising profit but those of sustaining life. The success of native Alaskan corporations supports the argument of Stammler and Ivanova in this special section that the more successful indigenous groups are those who have internalised an utilitarian approach to the land that has become commodified—even though that would never have been part of their own cosmology.

Based on some of the general conclusions of the papers in this volume, we offer some broad principles for further discussion and debate. We propose that greater inclusion of local knowledge and perspectives in decision making, particularly those of rights holders and others directly affected by industry operations, is one way to make decisions more sensitive to longer-term sustainability risks. We argue that local knowledge is also crucial to the consideration of alternative options to extractive industries and suggest that all available development options for an area and its inhabitants need to be considered equally seriously, without favouring extractive industries from the outset. This might help to ensure that when a decision is finally made it is for the right reasons and it is more likely to enjoy broad support from society. A social licence needs to be not only gained but also maintained, so it is essential to ensure that when extractive industry development takes place it is environmentally sound and compatible with existing local livelihoods. An empowered local civil society plays a critical role in ensuring that these priorities do not drop out of public consciousness. Industry and government, for their part, need to be as attuned to changing local needs and expectations as they are to the advances of science and the vagaries of commodity markets.

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