

Lectiones praecursoriae

Hanna Lempinen

The Elusive Social – Remapping the Soci(et)al in the Arctic Energyscape

Lectio praecursoria

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Equally in political, popular and academic debates, the Arctic region has become the world's new energy province. This growing interest in the Arctic and its massive energy resources is usually pictured as having taken shape in the interplay of various interacting and overlapping developments. Most importantly, the projected growth of global energy consumption plays a role: global energy demand is expected to increase by a third by the year 2040 (IEA 2015a, 6). What is more, despite the increasing importance of renewable energy solutions, much of this growth is still expected to be based on fossil fuel consumption (cf. IEA 2015b). At the same time, concerns over the availability of reliable and affordable energy supplies have intensified. On the one hand, reserves at existing production sites have been estimated to be gradually dwindling (cf. Owen, Inderwildi & King 2010; Di Muzio & Salah Ovidia 2016, 2). On the other hand, political instabilities and related delivery disruptions have contributed to an increased anxiety over the impacts that political events might have on securing uninterrupted energy supplies (cf. e.g. Liuhto 2009; Paillard 2010).

In addition, the changing climate has a role to play; however, the ways in which the axis of energy and climate is constructed in the Arctic region differs crucially from how this is done in broader energy-related debates. Whereas in the global context, the concern over the impact of fossil fuels on global warming is a defining feature – after all, the production and consumption of energy are responsible for an estimated more than two thirds of the world's annual greenhouse gas emissions (cf. e.g. IEA 2015b, 11) – in the Arctic region the retreating sea has mainly been expected to make previously inaccessible areas better available for energy extraction and transportation activities (cf. e.g. Kristoferssen 2014, 56; Mikkola & Käpylä 2014, 16; Loe & Kelman 2016, 25). Combined with evolving technologies, all of these developments are framed as pushing energy-related activities further and further towards the previously inaccessible north.

While this widely circulated version of what energy means in the Arctic – or, conversely, what the Arctic means in the context of energy – has gained significant foothold, the chain of reasoning it is based on has been questioned on many fronts. Among the most acute questions are whether the estimated reserves actually a) exist and b) can be utilized in a manner that is both economically profitable (McGlade & Ekins 2015) and feasible within the internationally agreed greenhouse gas emission goals (cf. IPCC 2014). Indeed, it has been argued that staying under the vital two-degree global warming

a. University of Lapland, hanna.lempinen@ulapland.fi

target would require leaving practically all Arctic hydrocarbon resources in the ground (McGlade & Ekins 2015).

Also the assumption of the Arctic becoming better available for energy-related activities as a result of climate change has been questioned: instead, it very well might be that the changes in climate not only reduce the ice cover but also contribute to more extreme and more unpredictable weather conditions. These, in turn, make energy activities in the north much riskier both operationally and financially (cf. Harsem, Eide & Keen 2011; Emmerson & Lahn 2012). The ongoing period of relatively low oil prices has also had a role to play (cf. OPEC 2016, 86–88): landmark development projects have been put on hold or cancelled, and major corporate actors have retreated from the region altogether (cf. e.g. ENI Norge 2012; Claes & Moe 2014, 111; *The Economist*, 3.10.2015). As a result, it might be that “*huge amounts of oil in the Earth’s crust will most likely never become available*” (Lähde 2015, 56) – including the much-desired hydrocarbon resources located in the depths of the icy, dark seas of the High North. From this perspective, we see an Arctic region of a very different kind – one that remains an “*energy backyard*” (Sidortsov 2016, 1) instead of becoming an energy frontier.

As intriguing the question of whether the Arctic will or will not become the new energy province for the world might be, it has not, however, been the core concern of my dissertation work. Instead, the research that I have conducted has been rooted in two ‘problems’ that I observed with the ways in which the northern energy concern was addressed.

The first issue had to do with the ways in which energy itself was framed: that the word ‘energy’ was being used as synonymous with the production of oil and gas for international markets. This understanding is problematic in several respects. From the more concrete side of things, it overlooks the extensive renewable energy endowments and ongoing developments in the field in the circumpolar north (cf. e.g. Hemsath 2010; Rasmussen & Roto 2011; Banul 2012). In addition, it also efficiently sidelines any concerns related to the consumption of energy, which remains a timely issue also in the Arctic region. Indeed, the very same Arctic that continues to be framed in terms of its energy wealth is, at the same time, also an Arctic of “*energy poverty*” (Hemsath 2010). Owing to the cold climate and long distances, some of the Arctic residents are among the highest per capita energy consumers in the world (Rasmussen & Roto 2011, 151). In some areas, energy related infrastructure is limited, unreliable or both and. As a result, questions related to access to and availability and affordability of energy as well as concerns associated with energy efficiency and energy saving are acutely timely also around the diverse Arctic region.

In addition to perceiving energy only in terms of oil and gas production, I found equally disturbing the ways in which energy remains relegated to the arenas of state politics or to the spheres of market transactions. Energy in the north continues to be framed either as an issue of state competition and power play or a commodity traded as any other by the logics and mechanisms of global trade (cf. e.g. Ciutâ 2010; Di Muzio 2016, 201). Energy in the Arctic is, peculiarly, at the same time *repoliticized* and *depoliticized* (cf. Kuzemko 2015). Despite their marked differences, these perspectives share common ground in the sense that they both place energy firmly outside everyday life and experience. As such, they efficiently work to exclude non-specialist perspectives from meaningfully taking part in any debates revolving around energy in the context of the north.

The second problem I had with the contemporary Arctic energy debate is closely related to this remark. Amidst all the talk about economic feasibility and environmental sustainability of Arctic energy developments, very scant attention appeared to be devoted to any social aspects associated with the northern energy concern. When societal issues were addressed, they were mainly reduced to socioeconomic concerns: employment and income expected to be generated through the implementation of grand-scale energy projects in the north. In the rare cases any issues beyond employment and income were discussed, it appeared to be consistently done in the specific context of Arctic indigenous populations. What needs to be emphasized here is that this remark is in no way intended to imply that the special challenges and concerns faced by the diverse indigenous peoples of the north would not be important to acknowledge and address. However, I do want to raise the question whether the ‘social dimension’ in the north – in the context of energy or beyond – can indeed be reduced solely to indigenous populations and concerns.

These observations did not only lead me to delve deeper into the textual and visual representations of the Arctic energy concern that form the empirical core of my doctoral study. In addition, they also

guided me to a lengthy journey into the conceptual work that has been done around the deceptively simple notions of energy, the social, and their often complex and without a doubt understudied interface. Indeed, equally energy and the social or the societal are concepts and, as such, they are not innocent or neutral descriptions of the world as it is or the Arctic energy concern and its societal dimension as they ‘really are’. Neither are they free from power relations or without potential consequence. Different ideas and articulations about what matters in Arctic societies in relation to energy – and vice versa – are intimately entangled with power: the right to define the good and the bad, the desirable, and the important in and for northern communities and societies. This makes the ways in which energy and its intertwinements with societal life in the north are talked about inextricably and inherently political.

Up until this point, I have used the word ‘energy’ in a very careless, even slightly promiscuous manner. This tendency is also a striking feature in public and political debates related to energy: despite or exactly because of the prominent role that energy has in all political, economic and societal life, what energy actually refers to is seldom explicated (cf. Littlefield 2013, 779; Rupp 2013). In a similar manner, energy resources have so far here been discussed just as if they would be somehow quantifiable, absolute and unquestionable states-of-the-world: that energy and resources would just be some raw materials that “*can be calculated as barrels, bushels, crates or some other handy units*” (Lähde 2015, 60) and that can be assigned an accurate and objective monetary value (Ferry 2016). However, the term of ‘resource’ is not synonymous with that of deposit: deposits become resources only when they are perceived as having utility and value from one perspective or another (Bridge 2009, 1219). These cultural appraisals of value invite discussion on how they are constructed, by whom and for whom (Nilsson & Filimonova 2013, 3). Energy is, in the end, a cultural artifact that is constructed through social relations (Desbiens 2013; Strauss, Rupp and Love 2013) and a lot more attention should be devoted to the processes in which and the encounters through it is constructed.

Against this broad background, the ways in which energy in the Arctic is discussed remain simplistic and inadequate. Even if consumption concerns and renewable energy developments are increasingly being accounted for in the regional energyscape, much of the energy-related talking and thinking remains intimately entwined with the idea of getting to extract the oil and gas resources of the region to have them transported and consumed elsewhere. However, what I find both noteworthy and worrisome is the consistent tendency to refer to energy demand and development as impersonal drivers: just as if they would be unquestioned statements of fact or independent laws of nature of sorts. They are deemed so inevitable and unquestionable that their course and impacts can, even at best, only be mediated and gently directed to maximize their benefits and minimize the harm they cause.

Constructing energy as an independent driver like this instead of seeing it as the contested cultural artifact that it is – comprised of situated values, practices and choices (Strauss, Rupp and Love 2013) – places the ways in which energy is thought about more in the realms of natural science and technology than in those of societal discussion and debate. As such, it efficiently works to further blur the fact that all decisions and measures related to energy are choices with both value underpinnings and real-life consequences. They are, as such, always inherently political, despite being rendered on several fronts as everything else but such.

What comes to the understandings of the social or societal dimension in relation to energy in the north, it hardly comes as surprise that a logic of this kind is found in close relation to a certain understanding of what constitutes the social aspects that energy might relate to or entail. It is a logic that constructs, advocates and essentially is able to grasp only those parts of the lived and experienced social world that can be reduced to indicators which, in turn, can be measured, managed and governed. This manner of understanding the social dimension also withholds an implicit understanding that the elements that constitute the ‘social’ would be the same regardless of the time and place where this social would be approached and investigated. As such, it does not really offer any concrete contributions in terms of the “*sorely needed conceptualizations of the social per se*” (Clarke, Friese and Washburn 2015a, 44) which is, more often than not, defined in static, human centric and developmental terms. Together, all of this demonstrates a dire need to readjust our vocabularies and understandings in order to better be able to grasp what might constitute the social and its intertwinements with the energy concern, both in the context of the north as well as beyond.

While the textual and visual vocabularies that we resort to when energy and the societal in the north are addressed share very little common ground, the above remarks on indicators point towards the only

theme around which the otherwise separate worlds of the techno-econo-scientific energy concern and the everyday life of the societal converge. This happens in the discussions revolving around harnessing the development of Arctic energy resources to serve as *the* developmental strategy for Arctic societies and communities. The well-being and future of the people in the Arctic region are seen to hinge on being able to capture the value and benefits of their natural resources. Not very much room is left for imagining a ‘development’ that would not be based on grand-scale energy extraction activities. In a similar vein, not much attention is devoted to what happens when the resources that are finite by definition have been exhausted. Instead, what the discussion does revolve around is how to conduct this development in a manner that would minimize its negative impacts and maximize the potential benefits derived from it.

There are two points that need to be made in relation to the discussion on the impacts of Arctic energy developments. The first has to do with impacts on whom and benefits for whom we are talking about *within* the region. In line with the ways in which the northern societal dimension as a whole tends to be conceptualized mainly in indigenous terms, the Arctic Energy Summit 2010 final report states that “*extractive development could bring wealth and jobs but impact a subsistence lifestyle*” (Hemsath 2010, 23). However, against the backdrop of literature on social impact assessments (cf. Vanclay 2002; Vanclay 2003) I argue that conceptualizing the societal impacts of Arctic energy activities only in the context of the indigenous populations or subsistence economies of the region is not enough. Macro- and microeconomic impacts, demographic changes, changes in the cultures of governance and education and changes in the living environment, among others, penetrate all aspects of everyday life in all affected northern communities and societies.

Another point related to the discussion on impacts and benefits has to do with the ways in which the impacts within the Arctic are framed in relation to any potential impacts elsewhere in the world. Anyone who has ever attended an Arctic conference has most definitely heard slogans like ‘What happens in the Arctic, does not stay in the Arctic’ or references to the ‘Global Arctic’. However, somehow this does not seem to be the case anymore when developing Arctic energy – or, developing the Arctic *based* on energy – is discussed. The impacts of Arctic energy developments are taken into account only to the extent to which they affect the Arctic region and its inhabitants. This regionalized understanding of sustainability stands in stark contrast with the way in which systems rhetoric has gained a dominant position in describing and conceptualizing the Arctic and its relationship with rest of the biophysical world. The Arctic is, oddly enough, at the same time perceived both as an integral part of the global system as well as an isolated, distinctive whole.

This remark has closely to do with another peculiar feature of the Arctic energy debate. At the same time when energy in the Arctic is seen as entangled with more or less all of the major challenges and developments that are unfolding in the region, there is one grand concern to which surprisingly little attention is devoted to within the explicit framework of energy: climate change. The energy-climate axis is to a great extent reduced to a matter of introducing cleaner, more climate-friendly technologies for regional energy production. This does not, however, even begin to address what happens when the resources extracted in the Arctic are in the end consumed, often far away from the region where they were produced.

This silence or denial around the climate concern in the context of energy appears especially odd when it is seen against the background of accelerating natural and social change in Arctic the region. At the same time when climate change is seen as among the biggest stressors and as one of the greatest threats to sustaining societal and cultural well-being and human development in the Arctic region, the climate impacts of Arctic energy developments are overlooked. Paradoxically, in the true spirit of Beck’s (1992) risk society, the future development prospects of Arctic societies are seen as inseparably dependent on the very same oil and gas developments which will eventually only further feed the greatest threat faced by the social-ecological systems of the Arctic region: climate change.

One of the pioneers of social scientific energy research, Benjamin Sovacool, has published an article in which he and his team analyzed altogether 4 444 energy-related journal articles published between the years 1999 and 2013 (cf. Sovacool 2014). Based on their analysis, the team concluded that a typical author of an energy studies article is based at a Northern American institution; he is male; and he is trained in science, economics or energy studies. Out of all of the nearly 4500 articles the research team went through, less than 13 percent made use of qualitative research methods of any kind. In addition,

less than 5 percent of citations in all of those journal articles were to social scientific or humanities journals. In my own doctoral dissertation I have done my best to add to these numbers and to respond to the authors' urgent call for interdisciplinarity in energy studies.

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References:

- Banul, Karolina (2012). Mapping renewable energy policies in the Barents region from a multi-level governance perspective. In Tennberg, Monica (ed) *Politics of development in the Barents region*. Lapin yliopistopaino, Rovaniemi, 265–297.
- Beck, Ulrich (1992). *Risk society. Towards a new modernity*. Sage, London.
- Bridge, Gavin (2009). Material worlds: natural resources, resource geography and the material economy. *Geography Compass* 3:3, 1217–1244.
- Ciutã, Felix (2010). Conceptual notes on energy security: total or banal security? *Security Dialogue* 41:2, 123–144.
- Claes, Dag Harald & Moe, Arild (2014). Arctic petroleum resources in a regional and global perspective. In Tamnes, Rolf & Offerdal, Kristine (eds.) *Geopolitics and security in the Arctic. Regional dynamics in a global world*. Routledge, London, 97–120.
- Clarke, Adele E., Friese, Carrie & Washburn, Rachel (2015a). Introduction to situational analysis. In Clarke, Adele E., Friese, Carrie & Rachel Washburn (eds.) *Situational analysis in practice. Mapping research with grounded theory*. Left Coast Press, Walnut Creek, 11–75.
- Di Muzio, Tim (2016). Critical theory, the open range and the illusion of the epoch. Di Muzio, Tim & Salah Ovidia, Jesse (eds.) *Energy, capitalism and world order. Toward a new agenda in international political economy*. Palgrave MacMillan, Basingstoke, 201–217.
- Di Muzio, Tim & Salah Ovidia, Jesse (2016). Energy, capitalism and world order in IPE. In Di Muzio, Tim & Salah Ovidia, Jesse (eds.) *Energy, capitalism and world order. Toward a new agenda in international political economy*. Palgrave MacMillan, Basingstoke, 1–19.
- Desbiens, Caroline (2013). *Power from the North. Territory, identity, and the culture of hydroelectricity in Quebec*. University of British Columbia Press, Vancouver.
- Emmerson, Charles & Glada Lahn (2012). *Arctic opening. Opportunity and risk in the High North*. 16.6.2014, <https://www.chathamhouse.org/publications/papers/view/182839>
- ENI Norge (2012). Production start-up at Goliat postponed. 12.6.2013, <http://www.eninorge.com/en/News--Media/News-Archive/2012/Production-start-up-at-Goliat-postponed/>
- Ferry, Elizabeth (2016). Gold prices as material-social actors: The case of the London Gold Fix. *The Extractive Industries and Society* 3, 82–85.
- Harsem, Øistein, Eide, Arne & Heen, Knuut (2011). Factors influencing future oil and Gas prospects in the Arctic. *Energy Policy* 39:12, 8037–8045.
- Hemsath, James R. (2010, ed) *Arctic energy summit. Final report and technical proceedings*. The Institute of the North, Anchorage.
- IEA (2015a). *World energy outlook 2015. Executive summary*. International Energy Agency, Paris.
- IEA (2015b). *Energy and climate change. World energy outlook special report*. 27.9.2016, <https://www.iea.org/publications/freepublications/publication/>
- IPCC (2014). *Climate change 2014 synthesis report. Summary for policymakers*. 13.5.2015, https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
- Kristoferssen, Berit (2014). *Drilling oil into Arctic minds? State security, industry consensus and local contestation*. Troms University Press, Tromsø.
- Kuzemko, Caroline (2015). Energy depoliticisation in the UK: Destroying political capacity. *The British Journal of Politics and International Relations*. 12.5.2017, <http://dx.doi.org/10.1111/1467-856X.12068>
- Nymand Larsen, Joan & Fondahl, Gail (2015, ed). *Arctic human development report. Regional processes and global linkages*. Stefansson Arctic Institute, Akureyri.
- Liuhto, Kari (2009, ed). *The EU-Russia gas connection. Pipes, politics and problems*. 15.3.2013, <https://www.utu.fi/fi/yksikot/tse/yksikot/PEI/raportit-ja-tietopakettit/Documents/Liuhto%200809%20web.pdf>
- Loe, Julia S.P. & Kelman, Ian (2016). Arctic petroleum's community impacts: Local perceptions from Hammerfest, Norway. *Energy Research & Social Science* 16, 25–34.
- Littlefield, Scott R. (2013). Security, independence and sustainability: Imprecise language and the manipulation of energy policy in the United States. *Energy Policy* 52:1, 779–788.
- Lähde, Ville (2015). Politics in a world of scarcity. In Bergnäs, Kaisa, Eskelinen, Teppo, Perkiö, Johanna & Warlenius, Rikard (eds.) *The politics of ecosocialism. Transforming welfare*. Routledge, Oxon, 55–67.
- McGlade, Christophe & Ekins, Paul (2015). The geographical distribution of fossil fuels unused when limiting global warming to 2°C. *Nature* 517, 187–190.
- Mikkola, Harri & Käpylä, Juha (2014). The uncertain future of the global Arctic. *Baltic Rim Economics Review* 2014:5, 16–17.
- Nilsson, Annika & Filimonova, Nadezhda (2013). *Russian interests in oil and gas resources in the Barents sea*. Stockholm Environment Institute Working Paper 2013: 5. Stockholm Environment Institute.
- OPEC (2016). OPEC Annual Statistical Bulletin. 28.10.2016, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2016.pdf
- Owen, Nick A., Inderwildi, Oliver R. & King, David A. (2010). The status of conventional world oil reserves: Hype or cause

- for concern. *Energy Policy* 38:8, 4743–4749.
- Paillard, Christophe-Alexandre (2010). Russia and Europe's mutual energy dependence. *Journal of International Affairs* 63:2, 65–84.
- Rupp, Stephanie (2013). Considering energy: $E = mc^2 = (\text{Magic} * \text{Culture})^2$. In Strauss, Sarah, Rupp, Stephanie & Love, Thomas (eds.) *Cultures of energy. Power, practices, technologies*. Walnut Creek, Left Coast Press, 79–85.
- Rasmussen, Rasmus Ole & Roto, Johanna (2011, eds). *Megatrends*. Nordic Council of Ministers, Copenhagen.
- Sidortsov, Roman (2016). A perfect moment during imperfect times: Arctic energy research in a low-carbon era. *Energy Research & Social Science* 16, 1–7.
- Sovacool, Benjamin K. (2014). What are we doing here? Analyzing fifteen years of energy scholarship and proposing a social science research agenda. *Energy Research & Social Science* 1, 1–29.
- Strauss, Sarah, Rupp, Stephanie & Love, Thomas (2013, eds.). *Cultures of energy: power, practices and technologies*. Left Coast Press, Walnut Creek, 10–38.
- The Economist (3.10.2015). Oil companies in the Arctic: A rig too far. 16.4.2016, <http://www.economist.com/news/business/21669912-shells-retreat-frozensnorth-shows-new-realities-big-oil-rig-too-far>
- Vanclay, Frank (2002). Conceptualising social impacts. *Environmental Impact Assessment Review* 22, 183–211.
- Vanclay, Frank (2003). International principles for social impact assessment. *Impact Assessment and Project Appraisal* 21:1, 5–11.