Contested energy spaces

Disassembling energyscapes of the Canadian North

Tarje I. Wanvik

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Author: Tarje I. Wanvik

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Synopsis

For decades, extractive industry developments have had direct and indirect impacts on indigenous communities in Wood Buffalo, Alberta, Canada. Yet, in a seemingly paradoxical manner and despite massive negative attention, there are several indigenous communities in favour of industrial developments on their traditional lands. To investigate this paradox, I embarked on an exploration of the contested energy space of the Canadian oil sands—investigating and analysing the characteristics, governance and power plays therein. In this PhD research project, I investigated how to *conceptualize* the *socio-material complexity* of contested energy spaces in the Canadian north, to identify *instability* and *potential for change* within them, and to *understand the power relations* between industry, state and indigenous communities. Hence, the overall effort of this PhD transcends the apparently narrow issue of indigenous responses to industrial impact, touching upon larger, more complex and generic problematics of energy and society relations.

Employing qualitative, Grounded Theory Methods (GTM) on a variety of scales, I present the research in two theoretically focused papers and two more empirically grounded ones. In paper #1, I discuss how to *conceptualize* the *socio-material complexity* of contested energy spaces. In this paper, by employing assemblage theory, I identify contested energy spaces as complex places or situations. I argue that to analyse and understand these complex situations, we need to equip assemblage theory with acknowledged geographical concepts of place (and materiality), scale (and networks) and power (as the mobilization of resources), providing analytical categories and tools for geographers investigating contested energy spaces specifically, and hopefully also contributing to the ongoing scholarly discourse on place.

Furthermore, in paper #2, I investigate how to identify *instability* and *potential for change* in contested energy spaces. Building on my initial reflections in paper #1, I elaborate on the instabilities of contested energy spaces, underscoring that instead of talking about techno-institutional complexes, regimes or a coherent systemic “fossil

capitalism" held together by co-articulation of institutions, infrastructures and practices, we can talk about a looser association of different social and material elements drawn together and pulled apart by a range of different forces. I argue that this is liberating because it frees us from the assumption that changes need to have an impact on the fundamentals of larger socio-technical regimes to be significant. For me, the important point is to illustrate that contested energy spaces are fragmented, contested and converted at particular sites. Therefore, contradicting those who suggest that assemblage thinking blunts critical sensibilities, I find in paper #2 that it is helpful in opening spaces for negotiation and contestation. I argue that there is a normative rationale for shifting researchers' attention towards instability and change. Destabilizing the permanence of contested energy spaces may be productive in its own right. The emphasis on structural constraints runs the risk of reproducing the oil industry's carefully scripted narrative of its own inevitability. It is critical that the specific lens that spatiality affords geographers is also used to identify the cracks in the wall and the leverage points for transformation.

Papers #3 and #4 discuss how to *understand the power play* between industry, the state and indigenous communities in the contested energy spaces of the Canadian north, but from two perspectives, or on different scales. On a macro scale (paper #3), I show that industrial activities have had great impacts on the social, cultural and environmental realities of the contested energy spaces. The burden has been substantial for local communities and has added to the prolonged historical conflict between the Crown and indigenous communities over rights and entitlements. This complex relationship has led to substantial challenges for all stakeholders. In response to these challenges, the federal duty to consult, along with provincial environmental impact assessments (EIAs) and locally negotiated impact benefits agreements (IBAs), has been delegated to industry, where corporate social responsibility (CSR) and stakeholder management form important centrepieces. This delegation has been legitimized on pragmatic grounds, to underscore the better positioning of industry to consult indigenous communities, to assess its own impact and to negotiate compensation and benefits agreements. I have identified an interrelated, nested and multiscalar governance structure emerging from these four

distinct governance features (Consultations, EIAs, IBAs, and CSR) that can be viewed as a joint mobilization effort by government, extractive industry proponents and indigenous communities to realize a workable, win–win regulatory environment in the contested energy space of Wood Buffalo.

On a micro scale (paper #4), the indigenous communities calibrate their participation in the emerging governance processes in the contested energy space of Wood Buffalo to strengthen their negotiating power. In this paper, I take assemblage theory as the basis of an analytical framework to examine indigenous Métis communities in Wood Buffalo. I reveal that indigenous engagement with extractive industry development is neither static nor (only) responsive in character. Rather, indigenous communities are strategic pragmatists that creatively and proactively engage in the development of extractive industries in their traditional territories. Viewing the interactions between the component parts of the contested energy space of Wood Buffalo as the workings of an unstable and changeable assemblage reconfigures our interpretation of indigenous engagement; we no longer see the people as passive victims or as only responsive to external pressure; we now see indigenous communities as proactive, pragmatic component parts of the Wood Buffalo carbonscape. I show that through strategic pragmatism, their traditional ways of life are imbued with substantial transformative capabilities. In paper #4, I show that these capabilities have moved the Métis communities of Wood Buffalo into formalized alliances with other stakeholders striving to evolve and change, to harvest strategic resources to their benefit.

Hence, by approaching my main research question through these four papers, I have eventually reached some conclusions: the indigenous communities of this study favour high-impact industrial activities in their traditional territories for several specific reasons. First, the complexity exposed in contested energy spaces does not offer simplistic or conventional understandings of indigenous agency. Second, the governance innovations of the contested energy space of Wood Buffalo entail different and untraditional approaches by which different stakeholders seek benefits from a highly lucrative industrial adventure. Third, by underscoring the instability of

contested energy spaces and their constituent parts, I show that indigenous communities are no less adaptable or pragmatic than other stakeholders, and they strive to evolve and change to harvest strategic resources for their betterment.

Introduction

Energy spaces—sites where energy is excavated, harvested, produced or consumed—have been subject to human imaginaries since time immemorial. Because it is a product of resources and forces of nature, energy is inextricably linked to our relationship with our environment: to identity, belonging, ways of life and leisure. From the prehistoric fireplace to modern nuclear power stations, from the deep coal mines to solar plants and high wind turbines, energy has been a prerequisite for our very existence.

Perhaps we should not then be too surprised by the persistent contestation and debate around questions of energy spaces. Large geographic spaces have been expropriated and transformed into power engines for entire societies, changing land features and land use forever. The stories seem the same all over the contemporary world: almighty industrial energy complexes looking for new energy-producing opportunities are challenged by small local communities affected by industrial violations to their everyday lives and environments. The affected communities reach the headlines of media providers; alliances are forged, protests are held, statements are signed, but in the end, industry wins. The prevailing narrative of the contested energy spaces describes an uneven, skewed power relationship between powerful industries and nation-states on the one hand and powerless communities and people on the other.

This is particularly true for the Canadian north, which is the focal point of this research. In the mass media and academic literature, the contested energy spaces of Canadian bitumen extraction[1] have been portrayed as chaotic and disorderly; they are both literally and metaphorically built on sand; tensions and a series of disputes over land and rights have arisen between the state, industry and local indigenous communities. Canadian governments have long exploited the bountiful natural

[1] Proponents and opponents label this contested energy space differently. While proponents underscore the refined end product (oil), the opponents focus on the polluting properties of the source (tar sands).

resources of the land while at the same time attempting to reconcile a difficult relationship with its indigenous communities. The oil sands region of Canada is primarily situated in the north-eastern part of the province of Alberta, until recently relatively sparsely populated by various indigenous groups of First Nations or Métis origin.

By exposing its desert-like features, vast tailing ponds and huge open wounds in the boreal forest landscape to the world (Szeman, 2012), the local and global media have made resource depletion and environmental destruction the primary imaginary of the oil sands. For decades, these developments have had direct and indirect impacts on indigenous communities throughout the region.

However, contrary to this negative coverage, my initial observations and pre-field-research findings were inconsistent with the majority of existing literature on these energy spaces. In a seemingly paradoxical manner, I found that several indigenous communities spoke in favour (albeit hesitantly and conditionally) of these industrial developments in their traditional lands. This sparked my curiosity, and I began developing my research questions and searching for answers. I embarked on an exploration of the contested energy space of Wood Buffalo, Canada—investigating and analysing its characteristics, governance and power plays to investigate this paradox.

Figure 1: Field area (map design by Max Koller). Source: Naturalearthdata and Alberta Environments and Parks

Research questions

- Why do some indigenous communities support extractive industry developments on their traditional territories, despite substantial destruction of the local environment and traditional indigenous land use practices?

To discuss this main research question, I elaborate on these subsequent questions.

- How can the *socio-material complexity* of contested energy spaces be *conceptualized*?
- How can *instability* and *potential for change* within contested energy spaces be identified?
- How can *the power play* between industry, state and indigenous communities in the contested energy spaces of the Canadian north be *understood*?

Contested energy spaces are fundamentally geographical. For centuries, geographers have described and analysed energy landscapes. The actors operating these spaces span a wide spectrum of geographical scales, from the local community to the global industrial conglomerate exploiting the resources. Therefore, geography is particularly suitable as a cradle for new, empirically grounded theoretical innovations around contested energy spaces.

My thematic focus is a contested field of research, involving a multitude of interpretations and meanings assigned to different actors and agitators. I wanted to look into the background of the energy production in the highly contested energy space of Wood Buffalo, Alberta and to consider its complexities, the historical and contemporary relationship between industry, state and indigenous communities, and how power plays manifest in the landscape. The contested energy spaces stretch far beyond the geographical location where extraction takes place. This implies that the *local* quickly emerges as a particular set of relationships and networks that link to a much broader set of relationships rather than as a singularity focused on a bounded location. This research has brought me to head offices in Calgary and Edmonton, to

corporate headquarters in Oslo, and all the way to the trap lines of Métis elders outside boomtown Fort McMurray.

To introduce the reader to the conceptual framing of the papers in this PhD compilation, this synopsis is organized into the following chapters. First, I elaborate on my understanding of contested energy spaces, drawing on the theoretical discussions of all four papers. Second, I present the field area and the communities of interest to this study, before I introduce my methodological procedures and reflections. Third, I summarize and link the academic papers, before concluding with my research findings.

Valuable insights may be drawn from the analysis. Today, there is a growing demand for a more sustainable energy future. We need to rethink and transform the ways that we search for, produce and consume energy. However, to change, we need to scrutinize and understand our current contested energy spaces properly. Where are the weaknesses, where are the strengths, and where are the pitfalls or the opportunities in the system when we opt for transformation and change? It is paramount to develop a theoretical and analytical framework to analyse barriers and challenges related to energy production and transformation. Existing contested energy spaces constitute excellent fields of study for such theoretical experimentation and production.

List of publications

Wanvik TI and Haarstad H. (2015) Råvaresonens geografi—steder som flerdimensjonale ansamlinger. *Med sans for sted. Nyere teorier*, Fagbokforlaget: 281–298. (Wanvik 75%, Haarstad 25%)

Haarstad H. and Wanvik TI. (2016) Carbonscapes and beyond: Conceptualizing the instability of oil landscapes. *Progress in Human Geography. (Haarstad 50%, Wanvik 50%)*

Wanvik TI. (2016) Governance transformed into corporate social responsibility—New governance innovations in the Canadian oil sands. *Extractive Industries and Society*.

Wanvik TI and Caine KJ. (2017) Understanding indigenous strategic pragmatism. *Extractive Industries and Society*. (Wanvik 80%, Caine 20%)

Contents

Scientific environment 2

Acknowledgements 4

Synopsis 6

Introduction 10

List of publications 15

Contents 16

Understanding contested energy spaces 17

Zooming in on contested energy spaces 33

Methodology 44

Conclusions 76

References 81

Paper #1

Paper #2

Paper #3

Paper #4

Attachments

1. Understanding contested energy spaces

Energy spaces have always been contested (Bridge, 2001). A series of bitter disputes between extractive companies, host governments and local communities in recent years have led to heavy losses for investors and threatened the development prospects of many resource-rich countries (Stevens et al., 2013). The management of tensions and risks around resource extraction is more or less the modus operandi of the extractive industries, just as fierce opposition to them seems to be a modus vivendi for local communities and NGOs all over the globe.

Energy spaces, where primary resources such as oil and gas are extracted, are often objects in the global power play for energy deposits, and arenas of everyday life for those who live there. After decades of increasing energy prices, these energy spaces have attracted a wave of new investments in natural resources, especially in coal, oil and gas, and there are high expectations about the profits from the sector in many parts of the world. In the post-industrial globalization discourse, many have pointed out that these energyscapes are constructed as asocial voids, ghost sites or deserts (Bridge, 2004; Catton, 1982; Ferguson, 2005; Hetherington, 1997; McClintock, 1995). There is a certain “discursive cleansing” that we may recognize from the colonization of America. The sites are attributed to the emptiness of human beings or culture while at the same time providing value through fertility and resource overflow. It is on the basis of this understanding of energy spaces that Bridge (2001) coins the phrase “bountiful emptiness”.

At the same time, theory concerning energy spaces has become more complex. The strong media and civil society focus on conflicts between multinational companies and communities has raised awareness about the local effects of natural resource extraction (Stevens et al., 2013). The role of multinational companies in trade in controversial natural resources, tax evasion and environmental degradation in developing countries has been the theme of television documentaries, social media and established news sources. In the Norwegian media, the “tar sands” in Canada, farmed salmon in Chile and diamonds in Sierra Leone have reached the headlines.

This has made it clear that the idea of "bountiful emptiness" cannot be maintained—such places are not asocial "locations" abounding with natural resources but otherwise empty. The energy spaces are instead understood to be arenas filled with social materiality, life and sensitive ecosystems.

These performances are still largely discursive—a wide range of stakeholders designs these spaces in accordance with their interests, often via mass media communication. Indigenous peoples are particularly vulnerable to such media representation as "ecologically noble savages" living in covenant with nature and the places where they live (Redford, 1991). McNeish (2012) claims that this has created incentives for communities in conflict with energy companies to transform their demands and identities in line with stereotypes that arouse sympathy and attract support from non-governmental organizations (NGOs). The effect of this is to emphasize the cultural diversity of people who populate the energy spaces. The energy spaces thus become places where unique cultural traditions are expressed. Such an understanding of an energy space may be called a "cultural spectacle".

The extreme ways to understand energy spaces thus become "bountiful emptiness" on the one hand and "cultural spectacles" on the other. Simply put, it may be said that a bountiful emptiness comes from a global perspective or a bird's-eye view, where the places gain importance through their position in the worldwide energy industry. A cultural spectacle, on the other hand, is created on a local scale, as a grounded perspective on cultural differences. Clearly, both of these understandings have aspects that are important in understanding contested energy spaces. At the same time, they are simplistic, stereotyping and—not least—static, so they are not suitable for academic understanding or conceptualization.

Figure 2: Illustrating bountiful emptiness versus cultural spectacle. Above: Syncrude oil sands. Below: Métis trap line cabin. Photos by the author.

The dichotomy between the "bountiful emptiness" and "cultural spectacle" views derived from the global and the local scales, respectively, provides challenges in many arenas. Politically, it challenges the practices of extraction concessions, reciprocity and the power plays between companies and local communities and authorities. Academically, it challenges methods of data collection and the framing of the relevant situations (see chapter 3 Methodology for details). Hence, to understand the scale of contested energy spaces, we need to understand the debates surrounding

geographical scale in recent years. In the following section, I explain how geographical *scale* influences the notion of contested energy spaces.

1.1. Contested energy spaces as scaled

What is scale, and how does it relate to contested energy spaces? In the most conventional understanding, scale is defined simply as the spatial reach of actions. Actions on different scales have different patterns, logics and rationalities, and deploy different material mediums and discursive idioms (Xiang, 2013). This is why contested energy spaces have such different meanings when viewed on a global scale (bountiful emptiness) versus a local scale (cultural spectacles). Two types of scales are particularly important in contemporary social science: taxonomical and emergent. Taxonomical scales are the building blocks of "the nested hierarchy of bounded spaces of differing size, such as the local, regional, national, and global" (Delaney and Leitner, 1997: 93). However, life is of course more complex than taxonomy. In social life, in particular, places always reach far beyond their perceived boundaries. This brings us to the second type of scale—the emergent. An emergent scale is the scope of co-ordination and mobilization that arises from collective actions, which in turn generate new capacity for the actors. As an explicit theoretical project, constructionist perspectives on scale are a fairly recent development of geographical thought. Their emergence may be traced to broader changes in social theory, such as different understandings of power and practice, and wider acceptance of some version of "social constructivism", and as a response to the inadequacy of inherited conceptions of geographic scale for understanding profound and perplexing transformations in the contemporary world (Delaney and Leitner, 1997).

Building on the assertion that scale is better understood dialectically than hierarchically, I argue that in addition to aspects of size and level, geographical scale should be considered as having an important facet of relation. By considering aspects of scale such as relation, we may begin to fill some of the gaps left by too narrow a focus on size and level as the metaphorical facets of scale (Howitt, 1998).

The scale debate, ignited by Marston et al. and their controversial article "Human geography without scale" (2005), has preoccupied the geographic community for the past decade. They claimed that any a priori conceptualization of scales (or any other form of hierarchical socio-spatial formation) in human geography was at best simplistic; worse still, it was structuralist—a reification of a vertical power structure rendering local places and minorities powerless in the face of forces on higher scales (i.e., global). Instead, they advocated for a "flat ontology", a theory of assemblages and of heterogeneous, irreducible complexity. The language itself was indicative of this aim: flat versus hierarchical, horizontality versus verticality, self-organization versus structuration, emergence versus transcendence, attention to ontology as opposed to epistemology, and so forth (Escobar, 2007).

Manuel DeLanda developed the framework of assemblage theory, which combines heterogeneous entities into some form of temporary relation (or set of relations), without presupposing that these relations necessarily constitute an organism (Anderson et al., 2012; DeLanda, 2006; Deleuze and Parnet, 2007). This theory evolved from two of the most important sources of flat ontologies: theories of complexity, particularly in the natural sciences, and the philosophy of Deleuze and Guattari. Flat alternatives can also be seen as building on and responding to the various waves of social constructionism and discursive approaches of the past few decades; they are akin to neo-realist ontology (Anderson et al., 2012; DeLanda and Harman, 2017).

The scalar protagonists have strongly confronted Marston et al., accusing them of selective reading of the scale literature, combined with a selective amnesia concerning the previous decades of scholarly debate. Particularly interesting in regard to this synopsis are the arguments posed by Escobar (2007). Although an advocate of flat ontologies, Escobar argues that DeLanda never rejected scales as socio-spatial formations of some sort. Conventional approaches assume the existence of two levels (micro, macro) or a nested series of levels (like a Russian doll). The alternative approach posed by DeLanda has been to use bottom-up analysis to show on each

scale how the properties of the whole emerge from the interactions between parts, bearing in mind that the more simple entities are themselves assemblages of sorts.

Another highly relevant claim is made by Leitner and Miller (2007), who suggest that the recognition of scalar orders and existing power asymmetries is crucial to progressive politics, in terms of both the development of alternative political spaces and the deployment of socio-spatial strategies of resistance.

Like previous advocates of a scalar perspective, Jessop et al. (2008) question any form of privileging a single dimension of socio-spatial relations, scalar or otherwise. They believe that this contributes to short intellectual product life cycles for key socio-spatial concepts, limiting opportunities for learning through theoretical debate, empirical analysis and critical evaluation of such concepts. They point to four distinct spatial lexicons developed by social scientists over the past 30 years: territory, place, scale and network (Dicken et al., 2001; Paasi, 2004; Sheppard, 2002). No lexicon on its own can fully describe socio-spatial events (Jessop et al., 2008). This critique particularly targets the flat ontologies of assemblage theory, with its bias towards network centrism, one-sided focus on horizontal, rhizomatic, topological and transversal interconnections of networks, frictionless spaces of flows and accelerating mobilities (Castells, 1996; Sheller and Urry, 2006).

I believe that there is a middle ground here that is not properly addressed owing to disciplinary quibbles. I would advocate an empirically driven, multidimensional assemblage approach where the processes constituting an assemblage and the forms of organization of heterogeneous entities (situated, scaled and networked) constitute the analytical basis of any geographical analysis of particular empirical situations. In the next section, I elaborate on the notion of contested energy spaces as assemblages.

1.2. Contested energy spaces as assembled

In recent years, the notion of assemblage has been explicated by Michel Callon when describing (economic) agency (Callon, 2008). Originally, Deleuze and Guattari employed the French term *agencement* to describe their ideas. *Agencement* in French

translates as “arrangement”, or what has come to be known as “assemblage”. It conveys the idea of a combination of heterogeneous elements that have been carefully adjusted to one another. Assemblages are arrangements endowed with the capacity to act in different ways depending on their configuration (Palmås, 2007). Heterogeneous, multidimensional assemblages are loose gatherings of human and non-human entities interacting in ephemeral and emerging constellations, where the very process of interaction gives rise to new reactions, not only from within the assemblage but also from outside. A place can be an assemblage. A company can be an assemblage. Moreover, according to Manuel DeLanda, there are assemblages within assemblages (DeLanda, 2006), so they may extend outwards like networks or up and down a scale like hierarchies.

An assemblage, according to Deleuze, is a multiplicity made up of many heterogeneous parts that establishes “liaisons and relations across ages, sexes and reigns—between constituent parts of different natures” (Deleuze and Parnet, 2007: 52). Thus, the assemblage’s only point of unity is that of co-functioning; it is a symbiosis. For Deleuze, the “unity” of assemblage is not that of an organic whole, or of a total system, where different parts are smoothly or violently subsumed into homogeneity. Therefore, it can be distinguished from models of socio-political composition that draw on organismic metaphors (Anderson et al., 2012).

Component parts are involved in processes of territorialization and de-territorialization of the assemblage. Territorialization is a process that stabilizes the identity of the assemblage, whereas de-territorialization destabilizes it. This corresponds to traditional understandings of the concept of territory as the bordering, bounding and enclosure (Jessop et al., 2008) of an assemblage. According to Deleuze and Guattari, assemblages are entities that consist of bodies and objects (referred to as content), as well as non-material entities such as statements (referred to as expression). Assemblages can thus be characterized by ongoing processes of territorialization and de-territorialization. There are processes that stabilize/consolidate and destabilize/dissolve (respectively) the identity of the assemblage (Deleuze and Guattari, 1988).

Contested energy spaces could be viewed as assemblages where various entities across scales (companies, NGOs, civil society organizations, opinion leaders, indigenous groups, local government or national government) fight over territory (bountiful emptiness versus cultural spectacle), resources (oil, gas, water, cheap labour versus hunting, fishing areas, open spaces or good jobs) and political priorities (extraction versus protection). The encounters between assemblages are critical phases in these processes, so events or moments where assemblages meet can be saturated with tensions and friction (Tsing, 2005) and processes of territorialization and de-territorialization are most frequent. These encounters, or relations, are external to their terms, meaning that something new is created out of these connections and is contested and fought over by the different parties involved in the encounter. Contested energy spaces are examples of venues for such encounters and tensions.

Assemblage theory can be described as schizophrenic, inasmuch as it favours process over entities while insisting on the autonomy of parts and the exteriority of relations (Anderson et al., 2012). However, in reality, it invites a dissection of power relations and influences. To understand how power and influence flow between the players in a given place or event, it is necessary to scrutinize the processes and to identify the transforming and/or stabilizing processes within and between assemblages over space and time. To conduct this power analysis, it is necessary to identify the networks, to explore the social hierarchies and to examine the local context. The next section expands on the notion of movers and shakers of energy spaces.

1.3. The movers and shakers in assemblages—stakeholders

Research on assemblages may be characterized by an emphasis on their "expressive potential" (Deleuze and Guattari, 1988) while accounting for the relative stability of (some) assembled orders. A concern with the exteriority of relations means that assemblage thinking is simultaneously concerned with the agency of component parts. This provides a way of describing how actors within the

assemblage may possess different resources and capacities to act. Deleuze and Guattari use the notion of the "operator" or "assemblage convertor" to highlight the catalytic impact of well-placed elements in either transforming assemblages or ensuring that relations and parts remain stable (1988: 324-325).

Situations create a variety of interests (or stakes) for the component parts (or stakeholders) of an assemblage. Thus, component parts may be defined as stakeholders in a given situation. Although stakeholder theory primarily focuses on the management of companies and their operative environments (Carroll and Buchholtz, 2012; Fassin, 2009; Freeman, 2010), I argue for a broader scope in which a stakeholder framework can be used in concert with assemblage theory to shed light on stakeholder relationships in particular situations, such as the extractive energy landscapes of Alberta, where different component parts have different interests or stakes in the governance of contested energy spaces.

Stakeholders are defined as directly or indirectly critical to the goals of other actors, be they companies (with the goal of earning profits from extraction) or a local government (with the goal of attracting foreign investments, increasing corporate taxes and creating jobs) or communities (with the goal of obtaining employment, controlling their resources, receiving compensation, gaining welfare services or having a safe environment) (Freeman, 2010). Second, they are directly or indirectly affected by other actors' operations, and they form the social and geographical framework within which the actors operate (Freeman, 2010). Stakeholder management binds the actors to each other and to the geographical context, because the stakeholders differ according to geographical area, and stakeholder agendas are context specific.

"Stakeholder theory is about managing potential conflict stemming from divergent interests" (Frooman, 1999: 193). To complete the picture of stakeholders and their influence on other actors, it is fruitful to identify stakeholders' properties and their ability to act. Mitchell et al. (1997) create an in-depth version of stakeholder

theory, which they present in a model based on three stakeholder attributes or capacities: stakeholder *strength*, *legitimacy* and *urgency*.

Stakeholder typology

According to Mitchell et al. (1997), the *strength* of a stakeholder is defined by quantitative properties, such as finances and number of personnel. *Legitimacy* is derived from social systems constituted by morality, reputation, values and norms. The urgency of stakeholder expectations and requirements is defined by the degree to which they require immediate attention.

The identification of stakeholder properties is part of the relational game played around an actor, where the power base of alliances between stakeholders may shift. For example, a demanding stakeholder may form a network with a dormant stakeholder and strengthen its impact considerably. As a complement to assemblage theory and stakeholder management, the notion of power is vital for understanding processes within and between assemblages. Power is a central theme in studies of contested energy spaces, which highlight skewed power relations and conflicts of interest between states and citizens, corporations and communities, and labour unions and employers (see for instance Bebbington et al., 2008; Bergstrom et al., 2013; Bickerstaff and Agyeman, 2009; Bridge, 2004; Miller, 2003; Ong, 2006; Sasson and Blomgren, 2011). As some studies have indicated, power and influence often hinge on the ability to establish connections beyond a place or situation (Haarstad and Fløysand, 2007). According to this view, power is not so much held over others as kept as a resource for achieving diverse ends (Allen, 2003; Allen, 2011a; Allen, 2011b; Amin and Thrift, 1994; Giddens, 1979).

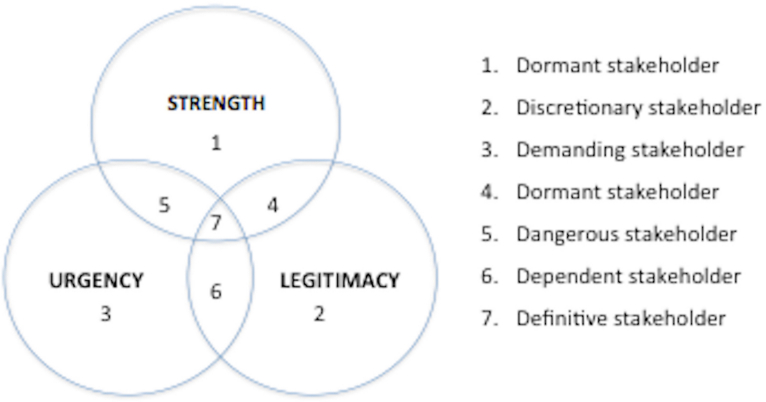

Figure 3: Qualitative stakeholder categories (Mitchell et al., 1997, in Carroll and Buchholtz, 2012).

The claim that power is produced or generated by groups or institutions distinguishes this concept from that of power as an inscribed capacity. Power is produced by a process of mobilization whereby firms or organizations—for example—reflect upon their own resources to achieve certain goals, and realizing their limitations, attempt to pool their resources with like-minded organizations as a means of securing what is now a common goal (Allen, 1997). This resonates well with DeLanda's notions of assemblages with independent components but with relations that are exterior to their terms.

Power, in this context, is a fluid medium. It is also closely related to resources. The term "resources" in this context implies both human resources—capacities and competences—and material resources, including financial resources. Resources are the medium through which power is exercised. Thus, power is the ability to mobilize resources and to use them to secure specific outcomes (Giddens, 1979: 91). Accordingly, when pooled collectively, resources can actively empower groups and organizations, but only as long as such resources are used in concert (Allen, 1997; Arendt, 1986). Component parts may occasionally align, or pool their resources as a means of securing common goals (Allen, 1997; 2003; 2011a; 2011b). Drawing on

Foucault, I claim that a contested energy space is an archipelago of different powers (Foucault, 2007: 156)

To summarize the conceptualizations of contested energy spaces, I have shown that contested energy spaces are assemblages of entities or components that are situated both inside the extraction site (such as local communities, company branches or NGOs) and outside (such as company HQs, national government or NGOs). The components are scaled, as they differ in the reach of their influence (such as local governments, national governments or global companies). Moreover, the components are most certainly networked, as they organize and assemble in different semi-structured ways to extend their influence. This networking is characterized by an ephemeral nature and emerging structure, in that some of the confluences of interests or arguments are more or less coincidental and sometimes even spurious.

1.4. Challenging the permanence of contested energy spaces

So far, I have elaborated on the conceptual foundations of contested energy spaces derived from paper #1 of this thesis. In this section, I underscore the instability of energy landscapes as described in paper #2, co-authored with Håvard Haarstad. Here, we describe contested energy spaces as those created by material expressions of carbon-based energy systems and the institutional and cultural practices attached to them. We name these spaces "carbonscapes" (Haarstad and Wanvik, 2016). As many theorists have reported, carbonscapes are shaped at the intersection of infrastructure, technology, the built environment and the various social, cultural and political regimes that govern them (Huber, 2013; Mitchell, 2011; Rutherford and Coutard, 2014; Urry, 2014; Watts, 2013). While a common theoretical stance is to depict the co-articulation of these elements as a coherent totality or as a stable organic whole, we theorize that carbonscapes are more contingent.

Contested energy spaces are characterized both by path dependencies and by rupture. The notion of a "- scape" is a play on "landscape", a term that has a long

history in energy geography and in the wider discipline (Calvert, 2015; Zimmerer, 2011). There is also a tradition of seeing landscapes as more than material artefacts, as permeated by, or constructed through social, political, cultural and economic relationships (Mitchell, 2002a). As Zukin et al. (1992: 224) explain, landscapes are "built around dominant social institutions […] and ordered by their power." In other words, when we use the notion of "carbonscape" to describe the relationship between energy and society, there is an explicit recognition of how social regimes and power relations create order and inertia. At the same time, there is more to carbonscapes than inertia—volatility and change are equally important parts of the overall picture.

Geographers and others have argued that the malaises of many extractive spaces are highly complex and must be understood in terms of skewed distributions of costs and local benefits, enclave formation and spaces of enclosure, and unequal integration with the global political economy of oil (Bebbington et al., 2008; Haarstad, 2014; Kirshner and Power, 2015; McNeish and Logan, 2012; Stevens and Dietsche, 2008). Watts (2013: 76), for example, has advocated attention to how oil is "inserted into an already existing political landscape of forces, identities and forms of power."

The operative perspective in this literature is typically that the local extraction spaces (and their patterns of underdevelopment, inequalities and environmental disruption) are intricately embedded in the broader political economy: multiscalar complexes involving oil companies, political institutions and more, exemplified by the resource curse literature (Humphreys et al., 2007; Haarstad and Wanvik, 2016; Mehlum et al., 2006). Much of this work is quite convincing, and foregrounding the power structures of the global regime of oil is an important part of its rationale. Yet, in this sense, it tends to present an image of relative stability and resistance to change, as local dynamics are closely embedded within the globalized regime.

In broad terms, central perspectives on fossil-fuel-based societies tend to stress the permanence and stability of energy regimes. The works cited in paper #2 are obviously not exhaustive, yet from studies ranging from the spaces of oil extraction to

the distribution and transport infrastructure to the urban spaces of consumption and practice, there is a tendency to emphasize the conserving and permanence-creating forces of capital and energy materialities. Across these various perspectives, a common thread is that the socio-spatial embeddedness of energy systems creates path dependencies, locking in carbon-based practices and skewed power relations between the stakeholders of contested energy spaces.

In paper #2, we argue that there is a need to reconceptualize the stabilities and instabilities of fossil fuel-based societies in ways that reveal new pathways for change and transformation. This should in no way disregard the significant permanence created by the embeddedness of energy in various aspects of society, which would obviously overlook important historical experience. However, if we are to understand how stabilities interact with volatility and instabilities—which are also important aspects of historical experience—then we need theoretical frameworks that enable us to identify and analyse them. In paper #3, I employ three different analytical lenses through which to examine these instabilities.

1.5. Governance of contested energy spaces

With their traditionally shared interest in the smooth operations of extractive industries, government and industry make strong efforts to include and integrate local, and often indigenous, communities in the value chain to enable them to benefit from the positive impacts of industrial development (Brownsey and Rayner, 2009). These efforts are reflected in extensive consultation processes (Lawrence and Macklem, 2000), environmental impact assessments (EIAs) (Morgan, 2012; O'Faircheallaigh, 2010) and impact and benefits agreements (IBAs) (Fidler, 2010). These governance features are thoroughly described and analysed in paper #3.

To create a more stable relationship between the component parts of the contested energy space of the Canadian north, the government has developed the flexible governance innovations analysed in paper #3 by employing analytical lenses from the discourses of the "post-political", the emergence of multistakeholder

governance, and the evolution of corporate social responsibility. Here I elaborate on the genealogy of various governance instruments and on how they constitute governance innovation reformulated as corporate social responsibility (CSR) and stakeholder management.

Governing the contested energy spaces of Alberta can be described as a process whereby an ever-wider range of actors is drawn into governing processes characterized not solely by rules, regulations and the exercise of hierarchical authority but by allegedly egalitarian networks that focus on partnerships and networks and blur the boundaries between public and private sectors.

1.6. Skewed power relations

Building on previous findings from papers #1–3, in the final paper (#4), I explore the contested energy space of Wood Buffalo from a micro perspective. For decades, the asymmetrical context of the Canadian north, with its economically disadvantaged rural indigenous communities and explosive economic growth in urban cores (fuelled by ever-expanding extractive industries), has concerned social scientists from all disciplines (Angell and Parkins, 2011). The governance of relationships between extractive industries and indigenous people is characterized by the comprehensive delegation of power by state institutions to industry (Arena et al., 2015; Caine and Krogman, 2010; Fidler, 2010; Harvey and Bice, 2014; Lawrence and Macklem, 2000; O'Faircheallaigh, 2007; Prno and Scott Slocombe, 2012; Wanvik, 2016).

Recognizing the limitations of a "passive victim" research perspective, contemporary scholars have advocated a new research perspective that is more responsive to the changing milieu of northern indigenous peoples and that "recognises indigenous peoples as conscious [sic], pragmatic actors in cultural change and adaptation" (Angell and Parkins, 2011: 72). The call for a new approach to northern indigenous research stems from the growing political power among northern peoples, their increasing education levels and political astuteness (Hovelsrud

and Krupnik, 2006), and the subsequent resurgence of indigenous communities, which was recently illustrated by the "Idle No More" movement and its reassertion of indigenous sovereignty in opposition to settler colonization (Barker, 2015; Coates, 2015; Wotherspoon and Hansen, 2013).

To a certain extent, indigenous people are still portrayed as responsive agents, only consulting on individual industrial development disturbances by invitation from a benevolent power holder (i.e., industry or the state) (Angell and Parkins, 2011; Chandler and Lalonde, 1998; Fleming and Ledogar, 2008). A better understanding of indigenous people's mobilization in support of their own goals and aspirations is required, including information about their proactive responses to industrial developments as agents in their own right, rather than a focus on their reactive adaptations.

In paper #4, I argue that an analytical framework is needed for understanding and explaining properly recent developments in indigenous Métis communities in the Canadian north. Several indigenous communities in this region have mobilized a variety of resources to increase their leverage and to expand their rights in the midst of the oil sands. Such transformative competence is nothing new (Pelling, 2011), but it has not been conceptually and comprehensively introduced into studies of indigenous practices. Hence, I argue that rather than being subject to circumstance, indigenous communities seize the moment through strategic and pragmatic engagement with an ever-changing environment (Wanvik and Caine, 2017).

In the next chapter, I zoom in on the contested energy space of northern Canada, starting from the federal level and working my way down to Alberta, Wood Buffalo and the three individual communities considered in this study.

2. Zooming in on contested energy spaces: The study area

To a Norwegian, Canada at first glance may be considered to be a part of the family. Our people share many of the same cultural traits, values, habits and institutional robustness. However, Canada is so much more than this.

Figure 4: Canada is so much more. The Rocky Mountains and the Alberta Prairie. From first field trip, 2014. Photos by Laura M. I. Wanvik.

From the wild, moist, mountainous west coast of British Columbia to the cold and vast Northern Territories, to the seemingly empty, never-ending plains of the Prairie Provinces, the country is wildly varied and complex. Canada is sparsely populated; the majority of its land territory is dominated by forest and tundra and the Rocky Mountains. However, it is highly urbanized, with 82 per cent of the 35.15 million people concentrated in large and medium-sized cities, many near the southern border.

Since the early 20th century, the growth of Canada's manufacturing, mining and service sectors has transformed the nation from a largely rural economy to an urbanized, industrial one. Like many other developed nations, the Canadian economy is dominated by the service industry, which employs about three-quarters of the country's workforce (Statistics Canada 2017). However, Canada is unusual among developed countries in the importance of its primary sector, of which the forestry and petroleum industries are two of the most prominent components. In Alberta, home of the largest oil extraction operation in the northern hemisphere, and thus the focal point of this research, the numbers are even more skewed.

Alberta, the westernmost of Canada's three prairie provinces, shares many physical features with its neighbours to the east: Saskatchewan and Manitoba. The Rocky Mountains form the southern portion of Alberta's western boundary with British Columbia. Alberta was named after Princess Louise Caroline Alberta, fourth daughter of Queen Victoria. The province is home to the country's largest deposits of oil and natural gas. The oil sands have the third largest oil reserves in the world, after Venezuela and Saudi Arabia.

With 11 per cent of the total population of Canada, Alberta accounts for around 17 per cent of its gross domestic product (GDP), 28 per cent of which is derived directly from the energy sector (Alberta Energy, 2017). In 2014, the oil and gas industry produced one-quarter of Alberta's GDP, almost 70 per cent of its exports and 35 per cent of Alberta government's revenues, and the industry accounted for just under 150,000 direct and indirect jobs (Alberta Energy, 2017). However, these

numbers do not account for important factors such as the volatility of the unconventional oil industry: the combination of fiscal and taxation policy that creates significant concerns related to revenue realization, the weakening of various regulatory regimes under pressure from the short-term priorities of the oil industry, and the costs of various externalities, such as pollution and inflation (Shrivastava and Stefanick, 2015). Government policy responses to these challenges have long followed a familiar trajectory by ceding more regulatory control to industry, opening new doors for foreign acquisitions, and raising financial, social and environmental subsidies (Shrivastava and Stefanick, 2015; Wanvik, 2016).

Albertans have always had "a mind of their own", distancing themselves from the federal government in Ottawa and to a large extent from the rest of Canada. The province's first decade was prosperous (1905-15); immigration accelerated, grain harvests were bountiful, new communities settled, and its network of railway lines expanded rapidly. Yet, resentment grew among farmers, who believed that the railways, banks and grain-elevator companies were jeopardizing their status as independent entrepreneurs (Canadian Encyclopedia, 2017). Alberta's dissent from the policies of the federal government has continued to this day.

One of the reasons for this dissent has been a particular characteristic of the Albertan economy. For nearly a century, Alberta's economy has relied on primary resource exploitation and subsequent dependence on foreign markets, moving from the export of fur, prior to becoming a province, to wheat and beef, and finally to petroleum. Although the existence of vast bitumen deposits has been known for decades, it was only with advances in extraction technologies and a rapid rise in international oil prices during the last part of the 20th century that the production of unconventional oil became profitable.

The rapid expansion of the oil sector has been achieved with significant government support for Alberta's oil industry in the form of investment, subsidies and tax breaks at both the federal and provincial levels (Shrivastava and Stefanick, 2015). Alberta's extremely industry-friendly tax and revenue sharing regime, along

with the province's propensity to externalize the social and environmental costs of bitumen oil production, has led to handsome returns for private corporations (Campanella, 2012).

The growing economic and political might of Alberta has made this province the barometer of political economic change in Canada. The rising political influence of this landlocked province can also be construed as leading to the "Albertization" of Canada under the previous federal government (2006–2015). This political orientation includes government austerity, especially with respect to social programmes, privatization of government services and a reduction in income tax for corporations and upper-income earners (Shrivastava and Stefanick, 2015).

Alberta is home to a large proportion of the indigenous communities inhabiting the North American continent. Nearly one in six indigenous peoples in Canada live in the prairie province, numbering approximately 221,000. They make up 6 per cent of the total population of the province. Nearly half of these are Métis, descendants of First Nations and European settlers, with their own unique cultural heritage (Sealey and Lussier, 1975), recognized as Aboriginal peoples in 1982 (Pulla, 2013) and granted "Indian" status as of 2016 (SCC, 2016).

2.1. The Métis

The Métis have historically been relegated to the status of "Canada's forgotten people" (Lischke and McNab, 2007; Sealey and Lussier, 1975). Métis communities are typically ignored in treaty negotiations and land claims agreements, because they have no recognized land base (with the exception of the Alberta Settlements). Without recognition of their land title, the ability of the Métis to raise revenues from specific land or resource development projects or to negotiate directly with land and business developers remains a challenge (Dubois and Saunders, 2013; Madden, 2008; Weinstein, 2007). With the very existence of their collective title to land denied by the federal government, the Métis must instead find other ways of asserting their right to recognition and self-determination. With their attitude of "just do it", the Métis

seek innovative ways of achieving self-government (Pulla, 2013), by bringing their claims through the courts (Weinstein, 2007) or through consultation processes and IBA negotiations (Wanvik, 2016).

For centuries, marginalized Métis communities in Wood Buffalo, Alberta and in Canada in general have struggled for recognition as rights-bearing communities. Generations have fought an uphill battle against prospectors, governments and industry—recently exemplified by the all-encompassing industrial adventures of the oil sands—to safeguard their rightful share of the riches from their traditional territories.

Some have claimed that "the very concept of Métis, as a people, challenged the established boundaries of culture in Canada" (Teillet, 2013: 7). Unlike the First Nations and the Inuit, the federal government has only recently recognized the Métis as Indians under section 91(24) of the Constitution Act 1867, so their well-being has not been formally recognized as a federal responsibility. After the Supreme Court case of *Daniels versus Canada*, the Crown received a certain fiduciary responsibility for the Métis (SCC, 2016). It was stated that Parliament has legislative authority for all indigenous peoples, and it is the federal government to which the Métis and non-status Indians can turn. This simple clarification unblocks the federal government's self-created obstacle to negotiations with these indigenous groups (Madden, 2016).

That the Métis share a sense of nationhood and collective consciousness as a distinct Aboriginal people has been well documented (See for example Adams et al., 2013; Andersen, 2008; Chartier, 1994; Chartrand, 2008; Madden, 2008; Sawchuk, 1985; Teillet, 2007; Teillet, 2013; Weinstein, 2007). Métis marginalization can be attributed to several factors, notably their unique history and differences in legal and policy positions of the federal government towards Aboriginal peoples in Canada (Dubois and Saunders, 2013). In the words of Métis leader Clément Chartier, "being Métis is more than being of mixed blood: there is language, heritage and a way of life" (Chartier, 1994: 82).

The Michif[2] concept of *kaa-tipeyimishoyaahk* implies the Métis notion of being "people who own themselves", implying an embodied understanding of independence and self-sufficiency (Gaudry, 2014). While formal constitutional recognition of their inherent right to self-government (among other defined rights) remains a goal, the Métis in the face of these challenges have had to find innovative ways to pursue self-government initiatives on their own (Teillet, 2007; Teillet, 2013; Madden et al., 2005).

2.2. Wood Buffalo and local communities

Oil began forming in southern Alberta when tiny marine creatures died and drifted to the sea-floor in prehistoric times. Over time, their bodies were compressed by heat and pressure and formed liquid rock oil—referred to today as petroleum. In the north, rivers flowing away from the sea deposited sand and sediment. When tectonic plates shifted to form the Rocky Mountains, the pressure squeezed the oil northwards, causing it to seep into the sand (Canada Oil Sands, 2017).

The Regional Municipality of Wood Buffalo (RMWB) is a specialized municipality located in north-eastern Alberta. Formed as a result of the amalgamation of the City of Fort McMurray and Improvement District No. 143 in 1995, it is the second largest municipality in Alberta in terms of area. It is home to vast oil sand deposits, also known as the Athabasca Oil Sands, making the region one of the fastest growing industrial areas in Canada. The oil sands region of Canada is primarily situated in the north-eastern part of the province of Alberta, until recently relatively sparsely populated by various indigenous groups of First Nations or Métis origin. As in many contested energy spaces, the oil sands region encompasses the traditional lands of indigenous people. One of the fastest growing indigenous groups in Alberta

[2] **Michif** (also Mitchif, Mechif, **Michif**-Cree, Métif, Métchif, French Cree) is the language of the Métis people of Canada and the United States.

is the Métis, with its close to 100,000 members, representing more than 21.4% of all the Métis of Canada (Alberta Métis 2017)[3].

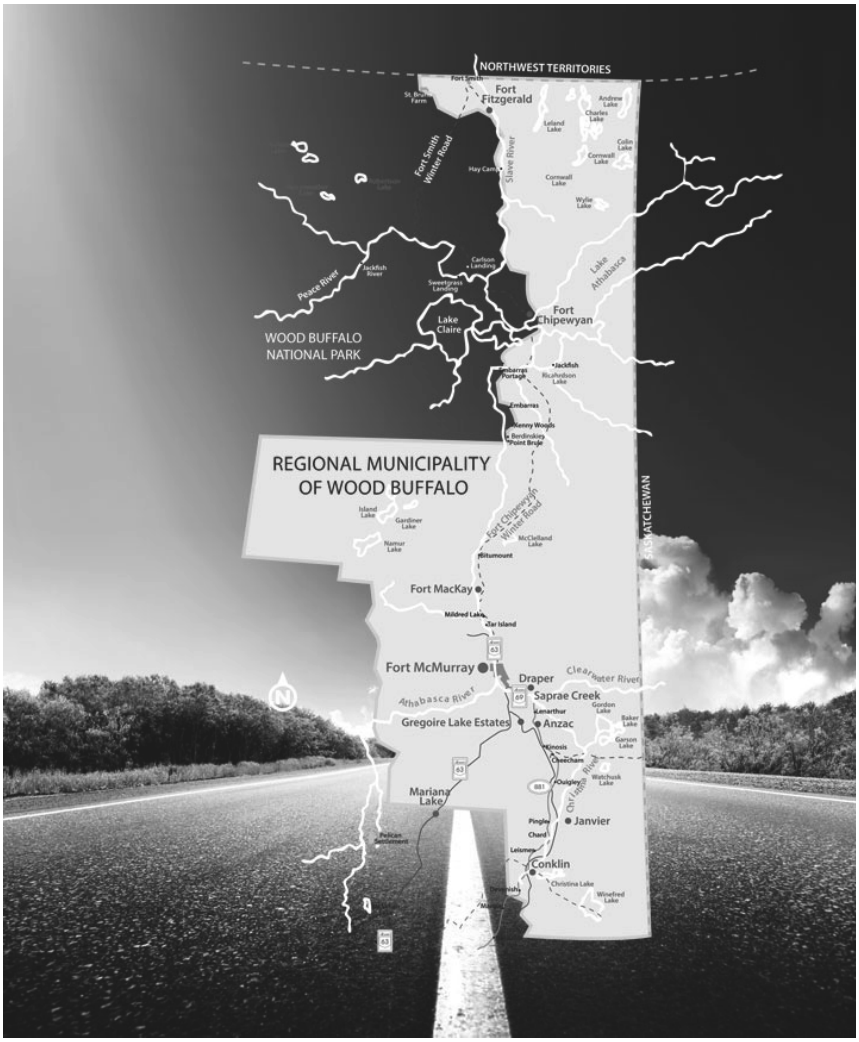

Figure 5: Regional municipality of Wood Buffalo. Source: Fort McMurray Tourism 2017.

According to 2006 census data, the indigenous Métis population accounted for 4.9% of the total population, while the First Nations population was 4.7%, indicating around 2500 people in each group. Indigenous groups constitute the majority of the

[3] http://albertametis.com/about/

rural population of Wood Buffalo, where the total number of inhabitants is 3500. The shadow population[4] of the rural areas outnumbered the locals by a factor of 10 (38,000) in 2015 (Government of Alberta, 2015)[5].

The three local communities of interest in this study are among the dominant Métis communities in the region and were chosen because of their location in the midst of the oil sands projects. Fort McMurray Métis is an urban Métis community in the regional urban centre of Fort McMurray. McKay Métis is found between the massive industrial open mining pits north of the urban centre. Conklin is situated further south, by Christina Lake along highway 881, in an area dominated by steam-assisted gravity drainage production (For reflections on sampling, see section 3.7).

My preliminary findings all showed some positive bias among these communities, albeit hesitant and conditional, towards industrial development of their traditional territories, and they all related to and negotiated with industrial players in their vicinity in different ways.

2.3. Fort McMurray

The first community considered in this research is McMurray Métis, situated in and around the boomtown of Fort McMurray. Nestled in a forest valley where the Athabasca and Clearwater rivers meet is Wood Buffalo's urban centre, the community of Fort McMurray, with around 80,000 inhabitants. Originally established as a Hudson's Bay Company trading post in 1870, today Fort McMurray attracts attention from around the world as the residential and commercial focal point of Canada's oil sands industry (RMWB 2017). The community has played a significant role in the history of the petroleum industry in Canada. Oil exploration is known to have occurred in the early 20th century, but Fort McMurray's population remained small, with no more than a few hundred people. In 1967, the Great Canadian Oil

[4] "Shadow population" refers to temporary residents of a municipality who are employed by an industrial or commercial establishment in the municipality for a minimum of 30 days within a municipal census year.

[5] http://municipalaffairs.alberta.ca/documents/msb/2015_Municipal_Affairs_Population_List.pdf

Sands (now Suncor) plant opened, and Fort McMurray's growth soon took off. On April 1, 1995, the City of Fort McMurray and Improvement District No. 143 were amalgamated to form the Regional Municipality of Wood Buffalo (Government of Alberta 2017)[6]. As a result, Fort McMurray was no longer officially designated a city. Instead, it was designated an urban service area within a specialized municipality. The amalgamation placed the entire regional municipality of Wood Buffalo under a single government. Its municipal office is located in Fort McMurray.

McMurray Métis was founded in 1987, and it is governed under the by-laws of the Métis Nation of Alberta. The McMurray Métis community represents a subregional hub within the wider Lac La Biche regional Métis community that extends from Île-à-la-Crosse, Saskatchewan to Fort McMurray and down to Beaver Lake and Lac La Biche (Clark et al., 2015). The centrality of the waterways to Fort McMurray has led to a strong Métis presence. The river system was the initial means of transport connecting the north-east of Alberta with the "historic trail" to the west through Saskatchewan, and the Métis played a crucial role in the navigation of the rivers, from scows to steamships. Oral history accounts are clear that the House River–McMurray–La Loche axis along the Clearwater was heavily Métis (Clark et al., 2015).

2.4. Fort McKay

The second community, McKay Métis, is located in Fort McKay, a small community approximately 45 km north of Fort McMurray, in the centre of most oil sands mining operations in north-eastern Alberta. Founded by the Métis during Canada's fur trade in the early 1800s, it is now home to Cree, Dene and Métis residents. The Fort McKay Métis community is historically and contemporarily connected to the larger Métis Nation, recognized in section 35 of the Constitution as

6 http://www.municipalaffairs.alberta.ca/cfml/MunicipalProfiles/index.cfm?fuseaction=BasicReport&MunicipalityType=SMUN&stakeholder=508&profileType=HIST

one of the Aboriginal peoples of Canada with distinct rights. The Hudson's Bay Company established Fort McKay in 1820. Until the oil companies arrived in earnest 150 years later, its people led a largely hunting-and-trapping existence (McCarthy, 2015)[7].

The Fort McKay Métis Community is made up of the historic Métis community that originally provided labour for the fur trade in the Athabasca region of what is now north-eastern Alberta in the early 19th century. Its members have a mixed ancestry that includes French, English, Cree, Dene and Métis heritage with close ties to members of the Fort McKay First Nation (Fort McKay Métis 2017). Located in the heart of the oil sands, the tiny community of between 44 and 300 inhabitants[8] has faced unprecedented change over the past 30 years. This change has brought both opportunities and challenges, but by following the elders' traditional teachings and committing to grass-roots development, the community is facing its challenges head on while taking advantage of the opportunities presented (Fort McKay Métis 2017).

2.5. Conklin

The third community is Conklin Métis. Despite its isolation, the hamlet of Conklin is at the centre of the oil sands development. Here, the Métis people have practised trapping, hunting, fishing and harvesting for over 100 years, living off the land. Steam-assisted gravity drainage operations combined with ancillary high-voltage transmission lines and bitumen pipelines have had a great impact on the area. There are currently 337 people living in Conklin, according to the latest census (RMWB, 2017)[9]. According to the community, the traditional harvesting territory of the Conklin Métis covers about 10,000 km^2, stretching from the Wiau and Grist lakes in the south to the Algar and Gordon lakes in the north (Golder Associates, 2011).

[7] http://www.theglobeandmail.com/news/alberta/where-oil-and-water-mix-oil-sands-development-leaves-fort-mckays-indigenous-communitytorn/article27151333/

[8] The numbers are contested, ranging from 44 recorded inhabitants of the hamlet of Fort McKay (RMWB 2017) to the "more than 300" claimed by local leaders (interview 2015).

[9] http://www.rmwb.ca/living/Communities/Conklin.htm

According to traditional land use studies from the area, the traditional way of life, based on hunting, fishing, trapping and gathering, is quickly becoming impossible for the Métis of Conklin (Conklin Métis Local #193 (TLU), 2012). Today, community members claim to find it increasingly difficult to access traditional lands. Old trails have been destroyed or upgraded into roads for trucking, numerous new seismic cut lines have been created throughout formerly intact lands, and long-standing routes have been restricted or blocked by oil developers (ibid: 36). Development has caused a rapid decline in the numbers of animals, berries and plants, as well as a decrease in air and water quality (ibid: 72). In addition, the social and cultural challenges experienced within the small community are devastating, with substance abuse, alcoholism, high crime rates and poor living conditions taking a heavy toll of its inhabitants (my own field work).

The history of the Conklin Métis is a microcosm of the complex history of the Métis (and other indigenous peoples) in Canada, which has been characterized throughout modern Canadian history by recurring cycles of settlement, displacement, dispossession and dispersion of Métis people from traditional homelands and movements to new lands (Conklin Métis Local #193 (TLU), 2012). The province of Alberta and the regional municipality of Wood Buffalo struggle to govern this complex landscape of industrial developments and traditional ways of life.

In line with an understanding of contested energy spaces as relational, emerging and multidimensional assemblages, research into the work of the various stakeholders and their power relations must include a wide range of methodological tools. In the next chapter, I elaborate on my methodological choices and practices, and reflect upon their applicability and suitability for the research questions.

3. Methodology

I consider myself to be a qualitatively oriented researcher. Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. As a qualitative oriented researcher, I turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to myself, involving an interpretive, almost naturalistic approach to the world (Denzin and Lincoln, 2000). This means that qualitative researchers like me study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings that people bring to them.

However, it is understood that each research practice makes the world visible in a different way. “Choice of research practices depends upon the questions that are asked, and the questions depend on their context” (Nelson et al., 1992). Hence, the research process is a perpetual, emergent dialogue between the researcher and the world. Looking back at the research behind this thesis, I realize how messy, creative and incremental research processes are and how decisive the research process is for a researcher’s conceptualizations of the world. From my early memos and field diary notes, I have rediscovered the curious and exploratory nature of a researcher’s first encounters with the field of inquiry, and how these encounters have formed both my research and myself along the way.

The thematic focus of this thesis is a contested field of research, involving a multitude of interpretations and meanings assigned to different actors and agitators. With this PhD research, I ask: why do some indigenous communities support extractive industry developments on their traditional territories despite substantial destruction of the local environment and traditional indigenous land use practices? I investigate (a) how to *conceptualize* the *socio-material complexity* of contested energy spaces, (b) how to identify *instability* and *potential for change* in contested energy spaces and (c) how to *understand the power play* between industry, state and indigenous communities in the contested energy spaces of the Canadian North.

I have striven to deploy several interconnected interpretive practices, hoping to improve my understanding of the relevant subject matter (Denzin and Lincoln, 2000). At the same time, it was important to me to choose research methods with which I as a researcher and the participants of my research would all feel comfortable, given that data are always produced in concert by the researcher and the researched (Charmaz, 2014; Glaser and Strauss, 2009).

3.1. Reflections on the research process

Any research project or investigation is built upon a fundamental epistemological stance (Holt-Jensen, 2009), guiding the formulation of research problems, the evaluation of theory, the choice of appropriate techniques and—above all—the interpretation of results. How do we know what we know, and how do we record knowledge about the world? These are tempting and grand questions to ask at the end of a PhD research process.

In epistemological discourses, the sources of knowledge and justification of knowledge are for the most part tightly connected to our human cognitive faculties. In general epistemology, these sources are often referred to as (a) perception, (b) introspection, (c) memory, (d) reason and (e) testimony (Steup et al., 2013). However, to trust our knowledge and beliefs, we must consider the reliability of these faculties and our subsequent ability to justify our knowledge claims.

In this research, I consider why certain groups or indigenous people support industrial developments on their traditional territories. I have approached this issue by mapping the complex power structures of the contested energy space of Wood Buffalo, Canada. When interviews, conversations, participatory observations and texts are used as sources of knowledge, most of the aforementioned faculties are activated, either by me as researcher or directly or indirectly by my informants. However, ultimately, as a qualitatively oriented social scientist, I am disproportionally dependent on testimony—from individuals, texts, representatives

and institutions. Testimony differs from the other sources of knowledge because it is not distinguished by having its own cognitive faculty (Lackey and Sosa, 2006).

Testimonies, I would claim, are in turn dependent on the other four faculties: the perceptions, introspection, memories and reasoning of my informants and me. With all the contingencies related to these faculties, there will always be a possibility of errors, mistakes, fraud and lack of honesty among interviewees, informants and other sources. Hence, one might say that the justification of our knowledge claims must be based on an interdependent set of faculties that all have flaws and fallibilities (Steup et al., 2013).

As a social science researcher, I believe that a way of managing these fallibilities is to employ different but interconnected forms of methodological triangulation: methods (faculty) triangulation, source triangulation and stakeholder triangulation. I have striven to employ different ways of encountering and engaging with my informants (interviews, conversations, observations and participatory processes). I have activated a wide variety of sources (strategy papers, traditional land use studies, individual testimonies, institutional statements, juridical verdicts and group discussions), and I have engaged a variety of stakeholders (representatives of indigenous groups, consultants, corporate managers, public officers and bureaucrats). These efforts were conducted to meet the scholarly obligation to seek clarity and to justify knowledge claims while gaining a wider understanding of the issues: the complex power structures of contested energy spaces in Wood Buffalo, Alberta (see section 3.7 for further details).

3.2. The situation as a case study

This study should be treated as a case study. To define a case, Yin (2013) suggests that the term refers to an event, an entity, an individual or even a unit of analysis. It is an empirical inquiry that investigates a contemporary phenomenon in its authentic context using multiple sources of evidence. Aase and Fossåskaret (2007) see case studies as being concerned with how and why things happen, allowing the

investigation of contextual realities. Case studies can be useful in capturing the emergent and immanent capacities of life in situations. They enable the researcher to gain a holistic view of a certain phenomenon, although the data produced in cases are always to some extent extracts from an all-encompassing complexity. According to Yin, there are three types of case study research: exploratory, descriptive and explanatory (Yin, 2013). In this study, I argue that the different varieties somehow overlap, in that I have sought to explore, to describe and to explain practices among various stakeholders in the contested energy spaces of the Canadian north.

According to DeLanda, assemblages (like companies or communities) are unique and singular entities. This notion of the "individual" requires brief clarification; as a realist, DeLanda argues that the word "individual" can be applied to anything, including communities, organizations, atoms, folded pieces of paper, species and ecosystems. As he puts it, every assemblage is an individual singularity with its own contingent history of emergence and conditions of pertinence (DeLanda, 2006; 2016). One of the major contributions of DeLanda's assemblage theory is that it serves as a framework of micro and macro levels of social reality. Interactions between people yield institutional organizations, interacting organizations yield cities, interacting cities organize the space in which nation-states emerge, and so on. In assemblage theory, wholes can serve as components of larger assemblages. The possibility of linking the micro and macro levels of social reality in this way is the result of recognizing that social processes occur on more than the two levels of micro and macro. By introducing intermediate levels of scale, assemblage theory can build up from the smallest entity (like an individual person) to increasingly larger assemblages (DeLanda, 2006). This study treats communities, companies and institutions as entities and objects of study in their own right. This implies that I have mainly interacted with the management level, with the exception of suppliers of consultancy services, where I have been in dialogue with each consultant. This is not to disregard the fact that these entities are plural, fragmented units containing divergent voices (assemblages within assemblages); it is only a way to limit my scope to avoid becoming stuck in a nihilist, deconstructivist quagmire.

3.3. Grounded aspirations

Throughout this research, I have been both consciously and subconsciously inspired by grounded theory methods (GTM) for a number of reasons. First, I have sought a way to systematize the collection and production of data. This was particularly important because of the messiness and contested realities of the field. Grounded theory provided me with a more systematic approach to data production, and this has given me a quicker overview and a more thorough insight into the contested energy space of Wood Buffalo. Second, my early observations were inconsistent with most of the existing literature on the subject; neither were they in line with conventional theories of indigenous responses to industrial developments. Hence, I sought a method of generating empirically based (grounded) theories based on these findings and subsequently enabling me to contribute to the ever-expanding literature on contested energy spaces. Grounded theory inspired me to embark boldly on a theory-constructing journey. Finally, I sought ways to construct empirically based theories on subaltern agency that may be tested elsewhere, in other settings, to analyse subaltern agency beyond resistance and reaction.

GTM is based on the diverse backgrounds of the two originators—Anselm Strauss and Barney Glaser. Stated simply, grounded theory methods consist of systematic yet flexible guidelines for collecting and analysing qualitative data to construct theories "grounded" in the data themselves (Charmaz, 2014). The research process brings surprises, sparks ideas and hones the researcher's analytic skills. The guidelines offer a set of general principles and heuristic devices rather than formulaic rules (Atkinson et al., 2004). First, grounded theory is an empirical approach to the study of social life through qualitative research and analysis. In this method, the analyst initially codes the data, giving temporary labels (codes) to particular phenomena (Clarke, 2005). Unique to this approach has been the fact that analysis begins as soon as there are data. Coding begins immediately, as does theorizing based on that coding, however provisionally (Glaser, 1978).

Methods alone—whatever they may be—do not generate good research or astute analyses (Charmaz, 2014). Mechanistic applications of methods yield mundane data and routine reports. A keen eye, open mind, discerning ear and steady hand can bring the researcher close to the object of study and are more important than developing methodological tools (Charmaz and Mitchell, 1996). This creative, pragmatic approach to methodology and research appeals to me and has been a guiding principle throughout my research.

3.4. Pragmatic heritage and hybridization

Pragmatism pervades the grounded theory method, and Charmaz (2014) claims that this is because of Strauss's Chicago school heritage. Strauss viewed human beings as active agents in their own lives and in their worlds rather than as passive recipients of larger social forces. Strauss brought notions of human agency, emergent processes, social and subjective meanings, problem-solving practices and the open-ended study of action to grounded theory (Charmaz, 2014). He particularly underscored the American pragmatist John Dewey's (1916) view that disavowed what he termed "the spectator theory of knowledge". Rather, we are part of the world that we study and the data that we collect (Bryant, 2009). Dewey proposed "the experimental theory of knowledge", where all knowledge is seen as provisional and is judged in terms of its usefulness for the knowing subjects, placing action and emancipation at the centre (Bryant, 2009). Hence, in all research practice, personal preconceptions should be considered. In line with this pragmatic approach, I have been inspired to propose a hybrid variety of grounded theory by invoking theory development strongly inspired by earlier theories around assemblages, power and pragmatism through active engagement with my personal preconceptions and former experiences as a practitioner.

3.5. Personal preconceptions and sensitizing concepts

Gadamer describes how our background shines through what he calls our preconceptions (Gadamer, 2006; Rennie, 2000). Charmaz (2014) underscores that

every researcher holds preconditions that influence, but may not determine, what we attend to and how we make sense of it. My own preconceptions were formed by a myriad of past experiences, but I will limit myself to describing some of my formative professional work during the past 20 years.

For most of my professional life, I have found myself to be an intermediary, a negotiator and translator of interests. First, as a young activist, the feeling of fighting superior powers was both an inspiration and a reason for being. Second, serving as a junior manager heading a progressive, young and ambitious political advocacy division in an established, large humanitarian NGO, there were constant negotiations with senior management and the board. Third, my decades-long engagement with non-profit, non-governmental organizations in development aid and political advocacy has left me with a strong social consciousness and a notion of social justice that has served as a guiding principle in this research process. Finally, when I was senior manager in a design company, negotiations with demanding clients, ambitious employees and impatient owners were part of everyday life.

GTM has provided me with a set of analytical approaches that are tools both to discover and to utilize my preconceptions of social justice, activism and the pragmatic nature of negotiations. GTM can move social justice studies beyond description while keeping them anchored in their respective empirical worlds. Thus, grounded theorists can offer integrated theoretical statements about the conditions under which defined forms of injustice or justice develop, change or continue (Charmaz, 2014). I have tried to recognize my preconceptions and to turn them into assets for my research. One way of accomplishing this has been to treat them as sensitizing concepts. An active pragmatic focus on social justice has sensitized me to view both large collectives and individual experiences in new ways.

Blumer's (1980) notion of sensitizing concepts is useful at this juncture. A sensitizing concept is a broad term without definitive characteristics; it sparks the researcher's thought about a topic. Charmaz encourages researchers to treat these concepts as points of departure for studying the empirical world (Charmaz, 2014).

Sensitizing concepts can help the researcher to start to code data. These concepts provide starting points for initiating the analysis but do not determine its content. My sensitizing concepts were constructed around key questions derived from my previous experiences as negotiator/mediator: How do social processes and situations change? How is power mobilized, with preferential treatment of hidden, unknown or unlikely power mobilization among subaltern groups? What meanings do participants attribute to the process or situation? What do they emphasize, and what do they leave out? In section 3.8, I elaborate on how my personal preconceptions have influenced and coloured my analysis and conceptual framing of the research topic.

3.6. Production of data

Rather than being excavated, found or collected, data are produced—in the encounter between the researcher, the study participants, and the material and discursive environments constituting the field. Glaser (2002) states that "all is data." Yes, everything I have learned in the research setting(s) or about my research topic can serve as data. However, data vary in quality, relevance and usefulness for interpretation (Charmaz, 2014).

Multi-sited field research

Social sciences today face a common challenge—an increasingly tangled and complex world (not necessarily diverse—rather homogeneous, but complex in its structure), where the social sciences are in the process of standardizing the tools for deciphering and analysing this reality. The notion that global diversity would be identified and understood through minute and slow studies of small communities is gradually being replaced by a complex world of interconnected and overlapping networks, relationships, meeting points and breaks. Such a world cannot be explained or analysed from a single place or community (Wanvik, 2015; Næss, 2015). We should attempt to distinguish and systematize connections, patterns, correlations and disruptions, acts and reprisals (Therborn, 2011: 208). Therefore, I have found myself

travelling between corporate headquarters in Oslo and Calgary, organizational hubs in Edmonton, Lac La Biche and Fort McMurray, and local community headquarters and individual trap lines in the midst of the boreal forests of Wood Buffalo, analysing how the parts fit together.

Sampling in multiple dimensions

In line with assemblage thinking, the contested energy spaces stretch far beyond the borders of the geographical place of extraction. Several disciplines note the importance of multiscalar approaches to practical research in the social sciences. According to Xiang (2013), multiscalar research is primarily concerned with how social phenomena are constituted through actions on different scales. Howitt and Stevens (2005) underscore multilocational fieldwork in locations linked by various aspects of contested energy spaces (e.g., networks: common ownership, downstream process integration, competition or government policies). This implies that the *local* quickly emerges as a set of particular kinds of relationships and networks linked to a much wider set of scale relationships rather than a singularity focused on a bounded location. This research brought me to head offices in Calgary and Edmonton, to corporate headquarters in Oslo, and all the way down to the trap lines of Métis elders. Any *local* is always and inescapably contextualized by a range of critically important power relations that were constructed on several scales. Relations across multiple scales and networks provide a vantage point from which to understand how multi-sited connections actually work and what the sites mean to each other (Xiang, 2013).

Analyses using assemblage approaches depend on the careful tracing of actor networks where many players (human and non-human) are at work constituting the outcome. However, reconstructing histories of ideas, stakeholder relations and political configurations through these interactions of objects/actors does not mean that explanations freely assemble a limitless cast of characters, each equal in power, all equally efficacious, and all with coherent intentions. Rather, it entails making "this issue of power and agency a question, instead of an answer known in advance. It means, acknowledging something of the unresolvable tension, the inseparable

mixture and the impossible multiplicity out of which intension and expertise emerge" (Mitchell, 2002b: 53).

However, the complexity involved in writing assemblage geographies can invite sloppiness. The Deleuzian injunction to "begin in the middle" methodologically, which admirably embraces the reality that all actors and subjects are always already in the middle, is important for assemblage geography but is also ripe for abuse. Half-finished stories, endings that become beginnings, and flashbacks are all part of the arsenal of excellent authors, but they can also be the signatures of unfinished research, quick editing and incomplete thinking (Robbins and Marks, 2010). Therefore, finding the relevant samples in this case has been a continuously challenging task, pushing me to seek precision, thoroughness and accountability, supported by the GTM framework.

In GTM, there is an explicit recognition of the iterative relationship between data gathering/production and analysis, and the ways in which they interrelate and guide each other. By extension, this more mindful and insightful view of the iterative process of data gathering-cum-analysis explains the idea of *theoretical sampling* that is key to GTM (Bryant, 2009). For some critics of GTM, it might seem to be a case of researchers looking for confirmation of their initial ideas, as opposed to trying to falsify or disprove them, but from the pragmatist point of view, it is far more a case of seeking ways in which my emerging concepts actually *work* in elucidating the specific research context (Bryant, 2009).

In my study, sampling has been driven not only by attempts to represent some social body or population but also especially and explicitly by theoretical concerns that have emerged in the provisional analysis. Such theoretical sampling focuses on finding new data sources (persons or things) that can "best explicitly address specific theoretically interesting facets of the emergent analysis" (Clarke, 2003: 557).

In line with Silverman's recommendation, the theoretical apparatus that I use has informed my sampling and my choice of case. Sampling in qualitative research is neither statistical nor purely personal; it is, or should be, theoretically grounded

(Silverman, 2013). Theoretical sampling and purposive sampling are often treated as synonyms. Indeed, the only difference between the two procedures applies when the purpose behind "purposive" sampling is not theoretically defined (Silverman, 2013). Bryman argues that qualitative research follows a theoretical, rather than statistical, logic. The issue should be couched in terms of the generalizability of cases to theoretical positions rather than to populations or universes (Bryman, 1988: 90). Theoretical sampling means selecting groups or categories to study on the basis of their relevance to the research questions that I wish to explore, to my theoretical position, and most importantly to the explanation or account that I have developed (Mason, 2002).

In this research, I have combined different sampling methods. In the early stages, I relied on purposive sampling to gain pace. Through corporate contacts and literature reviews, I identified some vital gatekeepers. These sampling efforts resulted in some version of snowball sampling, as my initial contacts were able to point me in the direction of other valuable sources. As I approached the situation through contacts in industry, private consultancies, public institutions and local communities, I could "triangulate" my sampling in a way that I hoped would compensate for otherwise problematic issues of bias in relation to snowball sampling, favouring one version of the situation.

It was important for me that the interviewees could speak on behalf of the company, institution or community that they represented. This is important for data collection and analysis, because the social and institutional position of each informant is essential when analysing the implications of his/her statements (Haarstad, 2009). Giampietro Gobo shows that the qualitative researcher should focus the investigation on interactive units such as social relations, encounters and organizations (Gobo, 2008). The sampling had to be developed during the research period, rather than beforehand, because this was a new situation for me, and I was reliant on "insiders" to gain access. The sample is defined not so much by the size of the universe of possible respondents as by the *situation* or event, and the movers and shakers in that situation.

I believe that through theoretically informed purposive sampling based on stakeholder identification and situational analysis, I was well equipped to describe and understand the tensions and transactions between state actors, companies and communities in the contested energy space of Wood Buffalo. This was not so much to describe a whole class of phenomena or actors (Becker, 2008) as to understand their situation.

3.7. Fieldwork: A variety of methods, sources and stakeholders

I entered the field to understand the experience of Norwegian multinational companies with the situated politics of place in the energy spaces of Canada. However, it soon became apparent that the complexity of the local politics demanded a more nuanced focus than one on the corporate sector alone. Fieldwork can be considered to mediate between theory, method and data; new information makes the researcher adopt new theories, concepts or methods, which in turn produce new information (Wadel, 1991). For a researcher, access to contested and conflictual situations can be challenging. In my case, my initial contact was through industry and the regional scholarship for research on traditional land use practices and colonial history.

Key informants

Researching contested energy spaces demands a great deal of political sensitivity, and it has proven to be challenging to produce data in Canada, where the polarization between supporters and opponents of oil sands extraction is pronounced and where conflict cuts across several political, economic and cultural aspects. In addition to a large amount of secondary literature on topics such as consultations, impact assessments and compensation agreements, I have been totally dependent on key informants who either have given me in-depth knowledge of the various aspects

of this complex problem or have acted as gatekeepers and opened doors to other, less accessible sources and stakeholders.

From the fieldwork for my master's thesis, I had established some contacts within the Norwegian state-owned oil company Statoil and its management in Indonesia. Through these contacts, I reached Statoil Canada and their CSR director. My main contact was a Norwegian expatriate who was willing to share the corporate social responsibility strategies and some insider reflections on local content and compensation schemes. He was attentive but somewhat aloof and referred to the company's Canadian lawyers and communications consultants, who did not appreciate researchers or activists, especially "Norwegians who came to sniff" (Statoil Canada manager, Skype interview, 2014). Unfortunately, he resigned shortly thereafter: first from the Canadian company and later from his position in Bergen. However, I met him on several occasions, before, during and after he ended his involvement in Statoil, and he has been very helpful with various sources and background documentation. My contact also recommended me both to the Statoil Headquarters in Oslo and to the newly appointed Canadian Director of CSR in Statoil Canada. However, I was soon to discover that the welcoming tone of Norwegian expatriates had turned into a more apprehensive attitude among Canadian nationals.

Given that the contested energy spaces of Canada were a new experience for me, I decided to embark on a pre-field visit in June 2014 to gain an overview of the field, to explore the geography of the situation, and to start building a network that might be useful when I returned the following year. I had made some arrangements with Statoil, some multistakeholder organizations and some regional scholars, lawyers and consultants, and I felt well prepared. However, during the actual pre-field trip, I found myself in a situation resembling a 90-minute interrogation at the corporate headquarters of Statoil Canada, where my ambitions and intentions were questioned and scrutinized, and where several of the planned meetings were suddenly changed or cancelled. The level of caution and reluctance from the company came as a surprise to me, and I was soon to discover that the conflictual nature of previous encounters with Norwegian activists had left the company, and especially the

Canadian national employees and management, nervous and not particularly eager to speak to a Norwegian researcher.

Figure 6: Early field trip 2014. Statoil headquarters in Oslo. Photo by the author.

Later, I found that the company had followed my tracks, gathering information about my whereabouts and my efforts to establish contact with local community representatives in Conklin and with multistakeholder initiatives. There are strong indications that the company partially discouraged stakeholders from participating in my study. At one point, I was told bluntly: “Statoil is an important member of (a multistakeholder organization) and would prefer you to use other resources to do your research” (email correspondence 2014). This forced me to seek other options to contact local stakeholders. Here, the literature review and dialogue with regional scholars proved to be fruitful.

In an early phase, while seeking scholars and professionals working for or with local communities, I came across a consultant and historian with extensive connections among the local communities around Fort McMurray. I was very pleased to learn that having worked with all three of the communities in this study, and serving on several boards of multistakeholder organizations in the area dealing with indigenous peoples, environment and the oil sands, he was willing to discuss these issues with me as a researcher and colleague.

I gained access to all the communities, with the help of my key informant. Sometimes he opened doors, sometimes he vouched for me, and sometimes he personally was a valuable source of information. Although this entry into the field may be criticized for being too dependent on individuals, it is difficult to imagine how I could have succeeded otherwise, given the challenging and conflictual nature of the situation at hand. I was fortunate to spend considerable time with my key informant and his extended network of community elders, leaders, consultants and managers, and these contacts were instrumental in framing and limiting the scope of my research.

A variety of sources

My pool of sources was determined by access. Given that contested energy spaces in general are difficult to access, some sources are more difficult to acquire than others. The data sources for this study were the following.

- Environmental Impact Assessments (EIA) from two companies totalling 5000–6000 pages of information about the environmental and social implications of oil production from Station Canada and Tech Industries.
- Four traditional land use studies from Fort McKay Métis, McMurray Métis, Conklin Métis and Chipewyan Prairie First Nation.
- Extensive secondary literature on consultation processes, environmental impact assessments and impact benefits agreements.

- Strategic documents, annual reports, CSR reports and action plans from Statoil.
- Area plans, consultation strategies, guidelines for impact assessments, and the six most significant Supreme Court verdicts handed down in relation to indigenous rights and opportunities related to contested energy spaces.
- News stories, blogs, YouTube interviews and newscasts related to indigenous management of multinational oil companies, traditional way of life, conflicting land use and conflicts.
- Email correspondence and Skype calls with interviewees and comments by 10 key players in the field.
- Semi-structured interviews and conversations with 30 key players from indigenous organizations, consultants, company representatives for indigenous companies, multistakeholder organizations, local chambers of commerce and local authorities.
- Discussions with scientists from the field.
- Observations from stakeholder gatherings, public seminars and cultural events.

Field visits were conducted in three stages, with preparatory fieldwork in June 2014, a month of fieldwork in June 2015 and a post-field trip in September 2016.

Data production methods

I have been fortunate to engage with company managers, community elders and leaders, and municipal employees in a wide range of formal and informal settings. The observations were both planned and coincidental, but I have always kept thorough notes of all activities, so I label them *formalized observations*. In line with contemporary trends in qualitative research, I have conducted in-depth interviews but of a somewhat special kind in that I have coined the term “camp-fire conversations”, akin to participatory observations or dialogues. These conversations occurred

irregularly throughout my three fieldwork experiences and constitute the backbone of my data material.

Typically, these conversations were initiated by the elders on an irregular basis but so frequently that the events may be called regular gatherings of elders and other members of the Métis communities.

Figure 7: Camp-fire conversations with Métis elders and youth 2016. Photo by the author.

In addition, I conducted both traditional semi-structured interviews and less formal face-to-face conversations with consultants, corporate CSR officers, municipal bureaucrats and community leaders and managers. Some of my interviews had to be conducted by Skype or email because of distance (see attachment II for a detailed overview).

Organizational documents were an important part of my data material and are evidence in their own right of the ways in which organizations seek to present themselves to particular audiences. That is, the goal of including such evidence in research design is not to triangulate the truth of interview or ethnographic data but rather to provide an additional data source about the case. In line with Charmaz's

recommendation, I treated each text as coherent simply because it was there, lying before me as a unified object (Charmaz, 2014). Environmental impact assessments were treated as sources in their own right, as were traditional land use studies, internal corporate strategy documents, annual reports, area plans and consultation strategies, and guidelines for impact assessments. Supreme Court decisions were treated as background information.

Distinctions are made between *personal* and *institutional,* and between *confidential* and *public* sources. During my research, I encountered all varieties. Two types of documents were particularly important to this study. (1) Environmental impact assessments (EIAs) are produced to meet regulatory requirements set by the province of Alberta. This objective has important implications for the format and content of these massive documents. (2) Traditional land use studies (TLUs) are particularly interesting because of the way in which they are produced and their objective. I was fortunate to participate when consultants conducted interviews for such TLUs among Métis elders. TLUs become institutionalized narratives of traditional land use practices, and their purpose is to gain recognition and political influence over particular territories.

Figure 8: TLU assessment, McMurray Métis trap line 2016. Photo by the author.

If grounding in the data is crucial, then there is no reason why extant literature cannot be part of that data. GTM may be criticized as an excuse for avoiding a proper literature review. I have deliberately worked to avoid this criticism by treating previous literature in the field of contested energy landscapes as data in its own right. One can never enter a research area with an empty head; one can attempt to maintain an open mind, but sometimes it is precisely one's prejudices—in the sense of prior judgements—that provide a basis upon which innovative insights can be developed (Bryant, 2009). It was crucial for me to understand that I inevitably take an active role in the process of "data gathering"; this is not simply a matter of harvesting something that occurs naturally. For pragmatists, reality is always in the making, and data are "carved out" from reality by social actors; this activity is socially located and is not simply an individual, isolated accomplishment (Bryant, 2009).

3.8. Transforming data into codes and categories

Coding relies on solid data, but when are data solid? I had limited opportunities to record conversations, interviews and observations. This was particularly true during camp-fire conversations, both because of time limitations on recording (the camp-fire conversations normally lasted for up to four hours) and because the recording conditions related to sound quality across a camp-fire were suboptimal. In addition, recordings would have altered the flow of the conversation, disrupting the free flow and sharing of thoughts and aspirations. However, all conversations, interviews and observations were transcribed and described immediately after the event, and I coded the data based on my immediate recollections of conversations in field notes and handwritten notes. Coding in the field was performed by writing marginal key words and comments—associations and reflections emerged as I read through my field notes every evening. These key words and comments were later transformed into codes and categories when I entered my data into software designed for qualitative methods (NVIVO 11). The codes and categories served as nodes in the software, and I organized my findings into analytical categories.

As mentioned in the previous section, these codes and categories were derived from two sources: first, they "emerged" from the data and the way in which the data sources appeared to me (Glaser and Strauss, 2009). Correspondingly, the codes and categories hinged on me as a researcher, and my own preconceptions and ideas on the world (see section 3.5). Thus, the codes and categories could be generated from what Charmaz (2014) calls *sensitizing concepts*. Based on my background experiences and my initial questions, I developed some sensitizing concepts that formed much of my research: these are concepts of *change, uncertainty, instability, pragmatism ("what works") and catalysing agency*. These concepts were derived both from practical experience and from theoretical reflections on, and readings of, assemblage theory (see sections 2.2 and 2.4), constituting an ontological approach akin to my perception of reality as perpetual process: always in the making, always unstable, changeable and uncertain. During my data production, these concepts acted as reminders. They reminded me to look for alternative voices, alternative mobilization of power and alternative versions of established, skewed power configurations. In the next section, I elaborate on how this informed my analysis.

3.9. Analysing data

The data analyses are intended to serve multiple purposes in this research. First, I needed to gain a closer understanding of the contested energy space as assemblage—who were the movers and shakers of the assemblage, and what kinds of stakeholders could I identify? Second, I sought to understand the governing mechanisms of the contested energy space and considered the extent to which I could identify potentials for change. Finally, I was eager to understand how indigenous populations and communities viewed their own situation in the midst of the contested energy space of Wood Buffalo and to explain why not all indigenous groups opposed industrial disruption of their traditional territories.

Situational mapping and analysis

Situational mapping and analysis supplement traditional or basic grounded theory with alternative approaches to both data gathering and processing/analysis/interpretation (Clarke, 2005). The situation per se becomes the ultimate unit of analysis, and understanding its elements and their relations is the primary goal (Clarke, 2005). Building upon and extending Strauss' work, situational analysis offers three main cartographic approaches.

- Situational maps that lay out the major human, nonhuman, discursive and other elements in the research situation of inquiry and provoke analysis of relations among them.
- Social world-arena maps that lay out the collective actors, key non-human elements, and the arenas of commitment and discourse within which they engage in ongoing negotiations—meso level interpretations of the situation.
- Positional maps that lay out the major positions taken and not taken in the data vis-à-vis particular axes of difference.

Primary, situated maps generated from NVIVO 11 word clouds are chaotic, complex and unstructured collections but nevertheless remain fruitful because they are organized according to word frequencies. Early coding was somewhat dependent on these word clouds to gain an initial understanding of the field. Combined with my first encounters with the field, these situational maps contributed to knowledge formation around the nature of the contested energy spaces.

I collected the data in three distinct phases. The first phase contained most of the written materials, such as environmental impact assessments, strategy documents, annual reports, email correspondence and initial interviews with key stakeholders. The second phase comprised conversations and in-depth interviews. The final round primarily contained conversational data from camp-fire conversations and interviews.

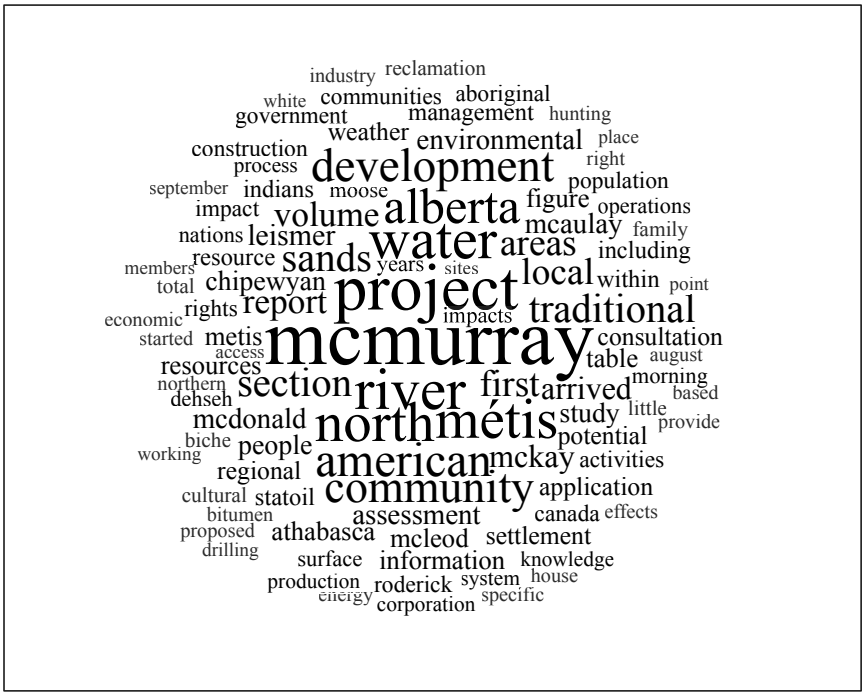

Figure 9: Data processing. Situational map, initial transcripts from phase one data collection. Automatically generated through NVIVO 11.

To me, this meshwork of words and conceptualizations (Fig.9) representing the contested energy space of Wood Buffalo provided me with some initial ideas about the interrelations between the component parts, or stakeholders. It reveals a close relationship between *industry* (signified by "North American" (later: "Statoil"), "project", "Leismer", "development" and "volume"), *environment* (signified by "water", "river", "environmental", "resource", "sands", "moose", "assessment" and "Athabasca") and *local communities* (signified by "community", "traditional", "consultation", "report", "local", "Métis", "first nations", "people", "McMurray", "McKay", "Chipewyan" and "rights").

Based on these initial findings, I coded my data into comprehensive categories, turning the situational map into a less fragmented assemblage of relevant concepts, as shown below.

Figure 10: Data processing. Situational map of initial findings phase one, coded version, generated by the author.

Here, I coded the data by organizing them into categories in close dialogue with the transcribed findings. I have weighted the concepts and words according to their frequency and their impact in the sources of information that I encountered in the early phases of my fieldwork. The situational map illustrates how the different aspects of the contested energy space of Wood Buffalo appear to the stakeholders overall. At first glance, the weighting seems to be biased in favour of industrial, extractive component parts. Words and concepts such as oil, investments, mining, CSR, money and employment dominate clearly at the expense of more environmental and social concepts such as damage, solidarity, traditions, "Indians" [sic], gathering, fishing, trapping and generations. Early in the process, I identified the primary polarization of the contested energy space of Wood Buffalo as being between proponents (industry and state) and opponents (environmentalists and local communities).

Furthermore, acknowledging the tensions between stakeholders in Wood Buffalo, I experimented with grouping the data into categories, to see whether my understanding of the area changed. This was revealing, and I derived the basis for paper #1 about the polarized realities of contested energy spaces. Here, analysing the wording and conceptualization of the contested energy space from two viewpoints

(industry and state versus indigenous communities and environmentalists), two distinct realities materialized in the situation maps below.

Figure 11: Data processing. Situational map 2a: the oil assemblage.

Figure 12: Data processing. Situational map 2b: the environmental assemblage.

These coded situational maps were generated based on all the initial data gathered on my first field trip, together with email correspondence, environmental impact assessments, traditional land use studies and strategy documents from industry. To a large extent, they resonate with the impressions that I gained from meeting state actors, and industry and community representatives.

Industry and other extractive industry proponents such as state institutions focused on job creation, oil opportunities, development, future prospects and growth, regulations and sustainability, and used technical terms such as location, seismic,

SAGD, reclamation, water quality and recycling. On the other hand, local communities and environmental NGOs focused more on traditional practices and environmental and social factors such as land, title, prairie, ancestors, trap lines, community, traditions (from earlier times) and nature, while technical aspects were almost totally absent. These findings led me to the preliminary conclusion that there existed a fundamental discrepancy between two distinct ways of viewing the contested energy space of Wood Buffalo. One was represented by the proponents of oil extraction—the oil assemblage—and the other by the opponents—the environmental assemblage.

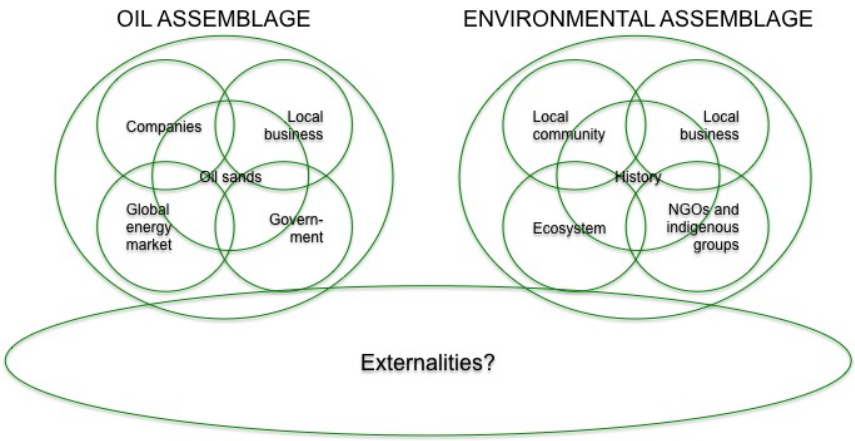

Figure 13: Data processing. Social world map/positional map of energy space of Wood Buffalo.

Turning these situational maps into social world maps was challenging, and I found that these efforts primarily bore fruit in relation to the pedagogical goals of disseminating my research to a wider public. However, they also helped me to identify relevant categories of stakeholders for my second field trip. An early version of this social world/arena map is Figure 13 (above), which shows the differences and similarities of the two assemblages constituting the contested energy space of Wood Buffalo, revealing the overlapping nature of the empirically derived assemblages.

The social world/arena map was combined with a positional map. Here we find the oil assemblage, containing multinational companies, local businesses, the global energy market and government institutions, tied together by the oil sands deposits and

their lucrative profits. This was opposed by the environmental assemblage, comprising local communities, local businesses, local ecosystem services, NGOs and indigenous groups, tied together by historical experiences and traditional land use practices.

However, as I coded and categorized my initial data, there were issues in the material that were not easily reflected in the situational maps, and I became curious as to whether there was more to the contested energy spaces than was apparent to the eye. So far, I had mostly identified power structures and alliances that confirmed the bulk of the literature on extractive industries and local responses. Fuelled by my sensitizing concepts of change, instability and alternative power relations, I embarked on my second field trip, eager to seek alternative understandings of the discourse of contested energy spaces.

Beyond discourse analysis

Discourse analysis offers a means of exposing or deconstructing the social practices that constitute a "social structure" and what we might call the conventional meaning structures of social life (Jaworski and Coupland, 2005). My aspiration has been to move beyond my own initial findings in line with conventional discourse analysis, given that the discursive practices of the contested energy spaces have already been scrutinized and recognized as skewed (Clarke, 2009; Huseman and Short, 2012; Le Billon and Carter, 2012; Nikiforuk, 2010). In this study, I sought loopholes in these discourses to identify scope for subaltern groups.

Reichertz (2007) argues that the term "abduction" combines the rational and the imaginative aspects of research, and this is precisely what theoretical sensitivity grounded theory method is meant to encompass: "Something unintelligible is discovered in the data, and on the basis of the mental design of a *new* rule; the rule is discovered or invented, and at the same time, it also becomes clear what the case is. The logical form of this operation is that of abduction. Here one has decided (with whatever degree of awareness and for whatever reasons) no longer to adhere to the

conventional view of things" (Reichertz, 2007: 219). Charmaz offers another definition of abduction: "a type of reasoning that begins by examining data, and after scrutiny of these data, entertains all possible explanations for the observed data, and then forms hypotheses to confirm or disconfirm until the researcher arrives at the most plausible interpretation of the observed data" (Charmaz, 2014: 188).

Critical Foucaultian discourse analysis usually (re)presents and analyses only one discourse in a situation—that with the most power in that situation. Yet a number of critiques of Foucault have centred on the absence of agency, which allowed the absence of resistance to discourse in his work. By not recapitulating the power relations of domination, I analysed a broader array of discourses to "turn up the volume on the lesser but still present discourses, lesser but still present participants, the quiet, the silent, and the silenced" (Clarke 2005:xx). This was my objective on the second field trip, when I sought the subtler signs and indications of alternative forms of power formation and mobilization. Of course, with this analytical widening of the range of discourses in a given situation, it becomes even more important to analyse power in that situation carefully (Crampton and Elden, 2007).

One of my early observations was that although indigenous groups were the obviously weaker component part in Wood Buffalo, these local communities exercised a disproportionate dominance of the discourse. I encountered the relative importance of indigenous communities and practices in strategy papers, impact assessments and interviews with industry and municipal agencies to such an extent that I developed a keen curiosity about why these miniscule, impoverished communities held such a tight grip on the overall discourse. This impression was strengthened as I conducted interviews and participated in seminars, camp-fire conversations and meetings during my second field trip. To understand this, I began to analyse the governance structure of the contested energy spaces (paper #3). By deciphering the multiscalar discourse of governance applied to the contested energy space of Wood Buffalo, I identified the governance structure of the Canadian oil sands, which is centred around managing the socio-environmental impact of industrial extraction on indigenous communities. By framing this as a macro-level

analysis involving discourses on governance, the post-political condition and corporate social responsibility, I concluded that there was a somewhat skewed power relation between industry proponents and indigenous communities, but I laid the foundations for a closer examination of the micro-level implications of a predominantly corporate controlled governance structure (paper #4).

Charmaz (2014) underscores that some of our best ideas may occur to us late in the process and may lure us back to the field. As this happened to me, I tried to remain focused on my initial ideas first and to finish one paper or project about them, but I later returned to my data and unfinished analysis in another area. To investigate my ideas of a more diverse and creative mobilization of power among stakeholders in this contested energy space, I decided to return a third time to the field. However, my plans were hampered by a severe wildfire that broke out in the area around Fort McMurray in May 2016, which lasted until June 21 (see Figures 14 and 15)

Figure 14: Métis traditional cabin lost in the fire of 2016. McMurray Métis community. Photo by the author.

The wildfire was devastating, forcing the entire city of Fort McMurray to evacuate its 80,000 inhabitants for days. I had to postpone my trip, but the aftermath of the fire provided a rare opportunity to study the mobilization of power among indigenous communities when I returned in September.

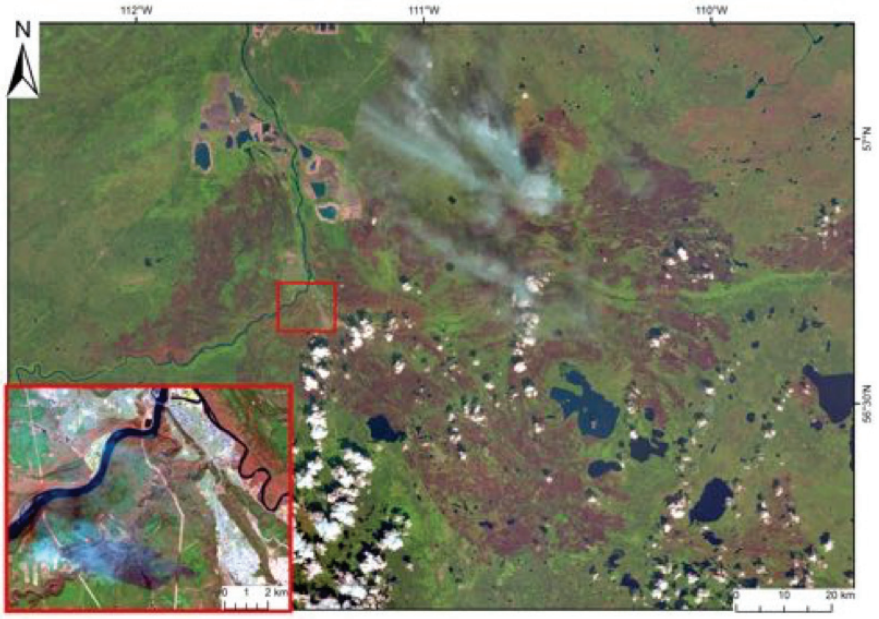

Figure 15: "The beast": Fort McMurray wildfire 2016 (Map design by Benjamin Robson). Source: Landsat 8, sentinel 2 false colour mosaic 03.05.16-20.06.16.

Through a case study of the massive 2016 wildfire in the regional municipality of Wood Buffalo in northern Alberta, I was able to reveal the fragile characteristics of this contested energy space, analysing how assemblage instabilities interfere with conventional ideas of power relations within carbonscapes and how the impact of the fire generated social and political mobilization among local Métis communities of Wood Buffalo and ultimately led to a renegotiation of the assembled order of the oil sands of Alberta. However, the approach was too broad for the issue I was investigating—indigenous strategic pragmatism—so I left the fire out of the final analysis, saving it for a book chapter currently in preparation (Wanvik, forthcoming). Instead, I developed an empirically grounded framework for understanding *indigenous strategic pragmatism* and the output, outcomes and impact of indigenous engagement with extractive industry developments over recent decades (paper #4).

3.10. Constructing theory

Theorizing is a practice (Charmaz, 2014). The fundamental contribution of grounded theory methods resides in guiding interpretive theoretical practice, not in providing a blueprint for theoretical products. A constructivist approach prioritizes the studied phenomenon and considers both data and analysis to be created from shared experiences and relationships with participants and other sources of data (Bryant, 2009; Charmaz, 2014; Charmaz and Mitchell, 1996). The analysis becomes more explicably theoretical when a researcher asks what theoretical categories these data represent (pragmatism, instability or uncertainty). Moreover, to the extent that I have interrogated relationships between my categories and fundamental aspects of human existence, such as the nature of social bonds or relationships between choice and constraint, individuals and institutions, or actions and structures, my work becomes yet more theoretical (Charmaz, 2014).

As I have assembled my earlier encounters with geographical literature, my preconceptions based on former engagements and my data-producing fieldwork, I have slowly developed a theoretical framework that I consider to be promising and fruitful in relation to contested energy spaces. It combines the clear inspiration of DeLanda's assemblage theory (DeLanda, 2006; 2016) with John Allen's power theory on mobilization of resources (Allen, 2003; 2011a; 2011b) and stakeholder theory (Fassin, 2009; Freeman, 2010; Freeman and Velamuri, 2006; Frooman, 1999; Mitchell et al., 1997), supplemented by a pragmatist approach of "what works" (Dewey, 1916; Jones, 2008; Rorty, 1999; Bryant, 2009).

Theories are rhetorical. Theorists attempt to convince readers that certain conclusions flow from a set of premises. The premises on which my assemblage of theories are based can be traced back to my sensitizing concepts (see sections 3.5 and 3.8): instability, change and alternative mobilization of power. A theory can alter one's viewpoint and change one's consciousness. Through my approach to contested energy spaces, I strive to see the world from a different vantage point and to create new meanings for it. I believe that this assemblage of theories is also promising for

other geographical subjects of study. However, substantive theories are closely linked to the context in which the research is grounded; only later can these theories become formal, after they have been taken up and used in other contexts and possibly by other researchers (Bryant, 2009).

3.11. Ethics

Working in contested energy spaces is challenging in a number of ways. Obviously, the conflictual character of a situation prompts careful consideration regarding ways to engage with different stakeholders. Ethically informed and considered research first and foremost involves three basic tenets: information, consent and independence (Silverman, 2013). Research subjects must be properly and fully informed about the purpose, methods and intended uses of the research, what their participation in the research entails and what risks may be involved (Silverman, 2013). During all my initial communications and engagement with stakeholder informants, I presented myself as a PhD student from the University of Bergen, and I described the project and my research objectives (see attachment III). A statement of intent and objectives prefaced all formal interviews. Less formal meetings, conversations and participatory activities all included a formal introduction to me as a researcher.

Given the discrepancies between the positions of stakeholders, and the danger of violating confidentiality related to agreements between corporations and communities, I avoided asking for sensitive information regarding specific agreements between my informants and corporations or their tenure. Because my objective was to explore the institutional setting and the impacts of state–industry–community relations, I chose to anonymize my informants, only citing them as representatives of their group or institution. Some informants will be traceable to certain groups or institutions by their position, but in these cases, the informants have spoken on behalf of their respective institution/group. None of my informants specifically asked for anonymity, but several times, they avoided sensitive topics concerning agreements and tenure.

The principle of information underpins the meaning of informed consent. Informed consent entails giving as much information as possible about the research so that prospective participants can make an informed decision on their involvement. Given my thorough presentation of the project, such consent has normally been granted in that my informants have been willing to speak to me or have invited me into their gatherings and social activities. I did not obtain written consent, as such a procedure would have hampered the necessary informality of the situation and risked introducing an awkward level of formality into the information flow.

My independence and impartiality as a researcher must be clear, and any conflicts of interest or partiality must be explicit. This was particularly important given that I engaged a wide variety of stakeholders in the contested energy spaces of Wood Buffalo. I have made an effort to portray the different interests and stakes presented to me in as thorough and correct a manner as possible, which is hopefully in line with the objectives of the stakeholders. To the best of my knowledge, I have no personal interests or affiliations that may create conflicts of interest in relation to either of my informants or their respective institutions or groups.

4. Conclusions

Each paper in this thesis answers different specific questions, and together they constitute the basis of some concluding remarks on my research questions. Why do some indigenous communities support extractive industry developments on their traditional territories, despite substantial destruction of the local environment and traditional indigenous land use practices?

As I have indicated in the introduction, I identify three sub-questions that inform my analysis of the main research question. These are: (1) How can the *socio-material complexity* of contested energy spaces be *conceptualized*? (2) How can *instability* and *potential for change* in contested energy spaces be identified? (3) How can the *power play* between industry, state and indigenous communities in the contested energy spaces of the Canadian north be *understood*?

The first paper discusses how to *conceptualize* the *socio-material complexity* of contested energy spaces. Paper #1 uses assemblage theory to identify contested energy spaces as complex places or situations. Haarstad and I argue that to analyse and understand these complex situations, we need to equip assemblage theory with acknowledged geographical concepts of place (and materiality), scale (and networks) and power (as the mobilization of resources). We provide some analytical categories and tools to assist geographers in understanding contested energy spaces specifically, and we hope to contribute to the ongoing scholarly discourse of place.

Furthermore, in paper #2, I investigate how to identify *instability* and *potential for change* in contested energy spaces. Building on our initial reflections in paper #1, my co-author and I elaborate on the instabilities of contested energy spaces, underscoring that instead of techno-institutional complexes, regimes, or a coherent systemic "fossil capitalism" held together by a co-articulation of institutions, infrastructures and practices (Urry, 2013; Huber, 2013; Unruh, 2000), we claim that there is a looser association of social and material elements drawn together and pulled apart by a range of forces. We argue that this is liberating because it frees us from the

assumption that changes need to impact the fundamentals of larger socio-technical regimes to be significant. For us, the important point is to illustrate that contested energy spaces are fragmented, contested and converted at particular sites. Therefore, in contrast to Brenner et al. (2011), who suggest that assemblage thinking blunts critical sensibilities, in paper #2, we find that assemblage thinking helps to open spaces for negotiation and contestation. I argue that there is a normative rationale for shifting researchers' attention towards instabilities and change. Destabilizing the permanence of contested energy spaces may be productive in its own right. As we find in paper #2, the emphasis on structural constraints runs the risk of reproducing the oil industry's carefully scripted narrative of its own inevitability. It is critical that the specific lens that spatiality affords geographers is also used to identify the cracks in the wall and the leverage points for transformation.

Papers #3 and #4 debate how *the power play* between industry, state and indigenous communities should be *understood* in the contested energy spaces of the Canadian north but from two perspectives, or on two scales. On a macro scale, paper #3 shows that industrial activities have had great impacts on the social, cultural and environmental realities of the contested energy spaces. The burden has been substantial for local communities and has added to the prolonged historical conflict between the Crown and indigenous communities over rights and entitlements. This complex relationship has led to substantial challenges for all stakeholders. In response to these challenges, the federal duty to consult, along with provincial responsibility for environmental impact assessments and locally negotiated impact benefits agreements, have all been delegated to industry, where corporate social responsibility (CSR) and stakeholder management are an important centrepiece. This delegation has been legitimized on pragmatic grounds, underscoring the better position of industry to consult the indigenous communities, to assess its own impact and to negotiate compensation and benefits agreements. I have identified an interrelated, nested and multiscalar governance structure emerging from these four distinct governance features (Consultations, EIAs, IBAs and CSR) that can be viewed as a joint mobilization effort by government, extractive industry proponents and

indigenous communities to realize a workable, win–win regulatory environment in the contested energy space of Wood Buffalo.

On a micro scale, the indigenous communities calibrate their own participation in the emerging governance processes in the contested energy space of Wood Buffalo to strengthen their negotiating power. This is the topic of paper #4, where I take assemblage theory as a basis for an analytical framework to examine indigenous Métis communities in Wood Buffalo. Together with my co-author, I reveal that indigenous engagement with extractive industry developments is neither static nor responsive in character. Rather, indigenous communities creatively and proactively engage with extractive industry developments on their traditional territories as strategic pragmatists. Viewing the interactions between the component parts of the contested energy space of Wood Buffalo as the workings of an unstable and changeable assemblage reconfigures the way in which we interpret indigenous engagement; we no longer see them as passive victims or as only responsive to external pressure. We now see indigenous communities as goal-motivated, pragmatic component parts of the Wood Buffalo carbonscape. Through strategic pragmatism, we show that indigenous communities have substantial transformative capabilities imbedded in their traditional ways of life. In paper #4, we show that these capabilities have moved the Métis communities of Wood Buffalo into formalized alliances striving to evolve and change to harvest strategic resources for their own benefit.

Hence, by approaching my main research question through these four papers, I have eventually reached some conclusions: indigenous communities in this study favour high-impact industrial activities on their traditional territories for several specific reasons. First, the complexity exposed in contested energy spaces does not allow simplistic or conventional understandings of indigenous agency. Second, the governance innovations in Wood Buffalo entail different and non-traditional approaches by which different stakeholders seek benefits from a highly prosperous industrial adventure. Third, by underscoring the instability of contested energy spaces and their constituent parts, I have shown that indigenous communities are no less

changeable or pragmatic than other stakeholders, striving to evolve and change to harvest strategic resources for their betterment.

4.1. Contributions to research

The world is will to power, being is striving, and being is flows or becoming.

(Deleuze and Guattari, 2004)

Energy production is contested. We need to rethink and transform the ways in which we search for, produce and consume energy. To change, we need to scrutinize and understand our current contested energy spaces properly. Where are the weaknesses? Where are the strengths? Where are the cracks or the possibilities in the system that might permit transformation and change? In this thesis, I have the ambition of developing a theoretical and analytical framework for improving understanding of barriers and challenges related to energy production and transformation. Contested energy spaces have proven to be an excellent starting point for such theoretical experimentation and production.

On the other hand, I have found geography to be particularly suitable as a cradle for new empirically grounded theoretical innovations around contested energy spaces. First, the theoretical toolbox of contemporary and historic geographical scholarship has proven to be of profound value for examining the processes of contested energy spaces. Second, the closeness of geography to empirical realities is vital when researchers bravely embark on journeys to construct new and useful theoretical frameworks. Third, the broad fan of methodological experience and knowledge that saturates geographical scholarship should enable all of us to produce relevant and intriguing data with which to analyse our common energy future.

In this thesis, I would like to have contributed to a body of research literature that explains and analyses processes of change in globalized places. I have sought to understand barriers and challenges related to governing contested energy spaces, and have drawn on experiences of what works. At the same time I aimed to understand

the challenges that society faces when approaching new energy sources to satisfy a limitless appetite for energy.

With my contribution underscoring the instabilities of contested energy spaces, and the complex assemblage of stakeholders and other component parts that constitute these spaces, I hope that in some way I have pointed to the changeability that lies underneath seemingly permanent and persistent power relations and energy fixes.

Additionally, I hope that my examination of the governance structures of the contested energy spaces of Wood Buffalo acts as a warning to all stakeholders about leaving governance processes to market forces alone. This can only increase the instability of these spaces. Instead, stakeholders should organize in multistakeholder or multisectorial forums, where negotiations between communities, the state and corporations should take place in a responsible, transparent and independent manner to secure benefits for all involved—stakeholders and other component parts. Unless proper participatory, consultative procedures are employed, and the government of Alberta develops a Métis consultation policy, all companies that hide behind the arbitrary processes developed by the Aboriginal Consultation Office regarding Métis consultation will risk having their project approvals quashed by the courts (Thompson et al., 2017).

Finally, I hope to have opened a broader perspective on the discourse on subaltern agency, exemplified by my encounters with highly empowered, politically active indigenous Métis communities, and the workings of what I have termed *indigenous strategic pragmatism*. Indigenous communities should never be treated only as subject to circumstance but as agents in their own right.

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PAPER #1

17

Råvaresonens geografi: Steder som flerdimensjonale ansamlinger

Tarje Iversen Wanvik og Håvard Haarstad

Institutt for geografi, Universitetet i Bergen

Introduksjon

I den norske olje- og energibransjen er det vanlig å snakke om «lokasjoner». Når man skal reise til steder hvor ressursene utvinnes, snakkes det gjerne om hvor langt det er til lokasjonen, hvordan arbeidsforholdene er på lokasjonen, hvor lenge man skal være på lokasjonen, og så videre. Det er nærliggende å tro at man her direkteoversetter det engelske begrepet *location*, noe som henspiller på en geografisk plassering basert på objektive kriterier som lengde- og breddegrader og høyde over havet. Begrepsbruken gjenspeiler sannsynligvis forståelsen av stedene og rollen stedene har i en slik globalisert næring. I oljenasjonen Norge får ekspansive norske oljeselskaper i økende grad kontroll og innflytelse på steder og i territorier utenfor sine tradisjonelle nasjonale landegrenser – og dette utfordrer etablerte forståelser av «våre» territorier. Samtidig står den objektivistiske oppfatningen av stedene hvor ressursene utvinnes ('lokasjonen'), i kontrast til stedsoppfatningen til lokale aktører og samfunn, som ofte møter særlige utfordringer i det globale spillet rundt klodens energiforekomster.

For geografer utfordrer disse «nye» stedene – råvaresoner, som vi kaller dem – en del innarbeidede tenkemåter. Det er lenge siden det var god latin å snakke om objektive karakteristika for steder. Vi tenker ofte på steder som arenaer for det levde liv, som delvis beskyttende sfærer, i motsetning til den mer umenneskeliggjorte, abstrakte og utrygge globale arenaen. Råvaresoner, steder hvor primærressurser som olje, gass og mineraler utvinnes, er ofte på samme tid objekter i det globale spillet om energiforekomster *og* arenaer for livsutfoldelse til dem som bor der. Etter tiår med høye energipriser har slike geografiske soner tiltrukket seg en bølge av nye investeringer i naturressurser, særlig innen kull, olje og gass, og forventninger om gevinstene fra sektoren er svært høye i mange deler av verden. Innen den

postindustrielle globaliseringsdiskursen har mange pekt på at disse råvaresonene blir konstruert som asosiale tomrom, spøkelsessteder, ødemarker (Catton, 1982; McClintock, 1995; Hetherington, 1997; Bridge, 2001; Ferguson, 2005). Det ligger en viss «diskursiv rensing» i en slik forståelse av steder, som vi kjenner igjen eksempelvis fra koloniseringen av Amerika. Stedene tilskrives en tomhet av mennesker eller kultur, samtidig som de bugner av verdimessig fruktbarhet og ressursoverflod. Det er denne stedsforståelsen av råvaresoner Bridge (2001) kaller «bugnende tomhet».

Samtidig har den teoretiske forståelsen av råvaresoner blitt mer sammensatt og komplisert. Et sterkt medie- og sivilsamfunnsfokus på konflikter mellom multinasjonale selskaper og «lokalsamfunn» har skapt en større bevissthet rundt lokale effekter av naturressursutvinning (Stevens, Kooroshy, Lahn & Lee, 2013). Multinasjonale selskapers rolle i handel med kontroversielle naturressurser, skatteunndragelse og miljøødeleggelser i utviklingsland har blitt tematisert i TV-dokumentarer, sosiale medier og etablerte nyhetskilder. I norsk sammenheng har «tjæresand» i Canada, oppdrettslaks i Chile og diamanter i Sierra Leone skapt overskrifter.[1] Dette har gjort det tydeligere at forestillingen om den «bugnende tomheten» ikke kan opprettholdes – disse stedene er ikke asosiale «lokasjoner» som bugner av naturressurser, men som ellers er tomme. Råvaresonene er i stedet forstått som arenaer fylt med sosial materialitet, liv og sensitive økosystemer.

Disse forestillingene er fortsatt i stor grad *diskursive* – de er konstruert av aktører som har interesser av at visse typer fremstillingsformer blir dominerende. Multinasjonale selskaper fremhever sine gode relasjoner til «lokalsamfunnet» gjennom sosiale ansvarsstrategier, hvor det er det stereotypiske og de visuelt tydelige prosjektene som står i sentrum. Ikke-statlige organisasjoner (NGO-er) velger på sin side ofte ut spesifikke tilfeller av urettferdighet som passer inn i deres kampanjer, og fremstiller disse overfor sitt vestlige publikum på en måte som spiller på forenklede stereotypier. Urfolk er særlig utsatt for en slik mediefremstilling som «ecologically noble savages» som lever i pakt med naturen og stedene der de bor (Redford, 1991). Både bedriftenes sosiale ansvarsstrategier og de ikke-statlige organisasjonenes kampanjer er i stor grad rettet mot publikum andre steder, gjerne i den vestlige verden, og er dermed avhengig av fremstillinger med retorisk kraft. McNeish (2012) hevder at dette har skapt insentiver for befolkningsgrupper i konflikt med utvinningsselskaper til å omforme sine krav og identiteter i tråd med stereotypier som vekker sympati, og som tiltrekker støtte fra NGO-er. Effekten av dette er at

[1] Debatten omkring utvinning av olje fra bitumen i Canada har også vært en kamp om definisjonsmakt. Motstandere har konsekvent brukt begrepet «tjæresand», mens oljeselskaper, myndigheter og andre som er positive til utvinningen bruker «oljesand» for å beskrive råvaren.

det er den kulturelle *annerledesheten* ved menneskene som befolker råvaresonene som fremheves. Råvaresonene blir dermed et sted hvor unike kulturelle tradisjoner kommer til uttrykk. Vi kan kalle en slik stedsforståelse for råvaresoner som «kulturelle skueplasser».

Ytterpunktene i stedsforståelsen av råvaresoner blir da «bugnende tomhet» på den ene siden og «kulturell skueplass» på den andre. Litt forenklet kan vi si at den bugnende tomheten kommer fra et *globalt* fugleperspektiv, der stedene får betydning gjennom sin posisjon i den verdensomspennende energiindustrien, mens den kulturelle skueplassen blir til gjennom et *lokalt* perspektiv på hvordan kulturelle forskjeller kommer til uttrykk. Det er klart at begge disse forståelsene har aspekter som er viktige for å forstå råvaresoner som sted. Samtidig er de begge forenklende, stereotypiserende og ikke minst statiske på hver sin måte og dermed ikke egnet som akademiske forståelser og begrepsfestinger.

I dette kapittelet skal vi diskutere hvordan vi kan begrepsfeste råvaresonenes geografi. For å illustrere dette skal vi skal se hvordan et norsk selskap – Statoil – opererer i råvaresonen Conklin i den canadiske delstaten Alberta.[2] Vi ser på råvaresoner som steder som blir til i samspillet mellom krefter, aktører og prosesser på ulike nivå. Det som kjennetegner råvaresoner som steder, er at de på samme tid er posisjoner på den globale energiindustriens verdenskart ('lokasjoner') og i stor grad blir påvirket av dette, og at de har lokalt baserte sosiale forhold og materialiteter som former dem. De kan ikke bli forstått uten det ene eller det andre. Det er dynamikken – samspillet, konfliktene og interaksjonene – mellom disse prosessene som utgjør råvaresonenes geografi, og som skaper dem som steder.

Vi mener dette utfordrer geografifagets teoretiske forståelser av sted, og det utfordrer norske selskapers forståelse av områdene de opererer i. Det utfordrer oss til å utforske hvordan makt, skala og materialitet i samspill kan forstås som konstituerende for steders eksistens og karakteristika. Til å hjelpe oss med dette velger vi å trekke på Manuel DeLandas teori om ansamlinger (assemblages). DeLanda (2006) foredlet en sosioromlig teori som på nye måter får frem og anerkjenner kompleksiteten og dynamikken i relasjonene mellom mennesker og deres omgivelser, og som ved hjelp av andre sosioromlige formasjoner, som skala og nettverk, kan bidra til å skape kunnskap og forståelse om hvordan makt og innflytelse utspiller seg på det som på mange måter kan kalles en moderne valplass: de globale-og-lokale råvaresonene.

[2] Conklin er en liten bosetting ved vestsiden av Christina Lake. Selve utvinningsområdene omkranser bosettingen på alle kanter. Statoil opererer lisensen i «oljesandprosjektet» Kai-Kos-Dehseh, hvor første utbyggingsfase, Leismer-anlegget, ligger noen kilometer nordvest for Conklin.

Råvaresoner i lys av romlig teori

Sted er et av geografifagets sentrale begreper og har vært gjenstand for omfattende teoretisk og empirisk diskusjon (se bokas introduksjonskapittel). Betydningen begrepet *sted* har for ulike teoretikere, henger i stor grad sammen med hvordan de kobler det sammen med andre sentrale begreper i det geografiske vokabular, som rom, landskap eller natur. I senere år har den relasjonelle forståelsen av geografiske begreper og prosesser blitt dominerende og har i stor grad erstattet tidligere forståelser av sted, rom og territorier som stabile og empirisk avgrensede enheter (Pierce, Martin & Murphy, 2011). Særlig arbeidene til Doreen Massey har fått enormt stort gjennomslag i disiplinen, og spesielt hennes begrep 'a global sense of place' (Massey, 1991). Massey ser på steder som «particular articulations of […] social relations, including local relations 'within' the place and those many connections that stretch way beyond it» (Massey, 1999). Med andre ord, steder karakteriseres som møtepunkt for sosiale relasjoner som strekker seg utenfor stedet – noen av disse relasjonene har gjerne global utstrekning. Det er den spesifikke kombinasjonen av møtende relasjoner som gir steder sine unike uttrykk.

Denne stedsforståelsen er langt på vei i tråd med våre betraktninger ovenfor, hvor vi understreket at råvaresoner som steder blir til i møtet med prosesser både i og utenfor selve stedet. Selve utvinningen blir oftest utført av datterselskaper av multinasjonale konsern, og den lokale ledelsen har tette eller løse koblinger til et hovedkontor et helt annet sted. Utvinningen inngår i en global strategi som påvirkes av priser og aksjekurser bestemt på et internasjonalt marked. Reguleringsregimet som råvareutvinningen er underlagt, er også i stor grad skalert, med ulike forpliktelser på globalt, nasjonalt, regionalt og lokalt nivå. Der NGO-er blir involvert, har også disse ofte koblinger til søsterorganisasjoner og andre allierte andre steder. Betydningen av eksterne relasjoner gjelder for så vidt for alle typer steder – ingen steder blir til i isolasjon fra omverden. Relasjoner med fjern og nær er det som definerer oss og stedene vi bor. Det relasjonelle perspektivet er også i tråd med den økende betydningen av nettverkskoblinger i den globaliserte, internettmedierte verden (Castells, 1996).

Det materielles tilbakekomst

Råvaresoner er imidlertid mer enn relasjoner. De kjennetegnes av at de har noen materielle kvaliteter som gjennom utvinning eller foredling blir til ressurser verdsatt av samfunnet. Før disse råvarene kommer opp av bakken og trer inn i den sosialt konstruerte sirkulasjonen i energisykluser, råvarepriser og børsverdier, har de blitt til gjennom materielle prosesser som fra et menneskelig perspektiv er mer eller mindre tilfeldige – geologiske strukturer med en tidsskala på millioner av år. Materialiteten som geologiske formasjoner og naturgitte forhold representerer, utgjør

en betydelig kraft i å forme steder (Bridge, 2001). *Hvordan* energiens og ressursenes materialitet former steder, er det vanskeligere å si noe generelt om, siden dette avhenger av sosialt konstruert verdisetting, sirkulasjon, teknologi og anvendelse i ulike kontekster (Smil, 2010).

En annen og kanskje viktigere umiddelbar materialitet trer frem i relasjon til *konsekvensene* av ressursutvinningen. Naturgitte omgivelsers «respons» på industriell virksomhet er mange ganger høylytt og iøynefallende, enten i form av åpne sår i landskapet fra utvinningsindustrien, forurensing av jordsmonn og vannreservoarer som følge av prosessindustrien eller i form av endringer i migrasjonsmønstre blant dyr som følge av utstrakt infrastruktur og menneskelig aktivitet. Maktspillet som foregår i og rundt ressursutvinningen på ulike skalaer, danner også grunnlaget for de sosiokulturelle og politiske konsekvensene av utvinningen i råvaresoner.

Masseys (2005) konseptualisering av sted gir et innsiktsfullt analytisk utgangspunkt for en beskrivelse av steder og deres materialitet. Sted, argumenterer Massey, er et «praktisert sted», som alltid er «under konstruksjon» (2005, s. 9);[3] sted er en «sfære av relasjoner, forhandlinger, praksis og makt i alle dets former» (2005, s. 99). I en radikal avvisning av det tradisjonelle geografiske skillet mellom 'sted' som det lokale, levde og hverdagslige, og 'rom' som det abstrakte, foreslår hun sted som en sfære av «sameksisterende» heterogenitet (2005, s. 9). Teoretikere som Taylor (2014) og Barad (2007) har på ulike måter forsøkt å utvide Masseys romforståelse med en økt grad av betoning av materialitet. For eksempel finner Taylor det nyttig å supplere Masseys forståelse av sted med Barads materialitetsbegrep for å forstå «tid–rom–materialitet». Et gjennomgående argument hos flere av disse teoretikerne er at rom, tid og materialitet ikke eksisterer hver for seg, men fremstår sammen i en pågående og sammenhengende flyt. Ved å inkludere det materielle som agens får forståelsen vår av sted en ekstra dimensjon, hvor ikke-menneskelige komponenter gis en mer sentral plass for å kunne forstå råvaresonen som sted.

Topografiens betydning

Et annet vesentlig aspekt ved stedsdannelsen i råvaresoner er de institusjonelle, juridiske og geopolitiske rammene for forholdet mellom aktørene. Råvaresoner som steder er i stor grad formet av nasjonalstatlige forhold. Dette har blitt spesielt tydelig i debatten rundt «ressursenes forbannelse» og «god forvaltning» (good governance). Her er konsensus at nasjonalstatlige institusjoners evne til å forhandle kontrakter, kreve inn skatter, forhindre korrupsjon og håndheve lover er avgjørende for hva slags utfall ressursutvinning får (Humphreys, Sachs & Stiglitz, 2007). Men det er ikke bare på den nasjonale skala at avgjørende politiske og økonomiske dynamikker

[3] Alle sitater fra engelskspråklig litteratur som er gjengitt på norsk, er oversatt av forfatterne.

utspiller seg. Haarstad (2014b) har vist hvordan prosesser både «under» og «over» den nasjonale skala påvirker utvinningen på spesifikke steder. Wanviks (2014) studie av norske selskapers sosiale investeringer i Indonesia viser hvordan ulike statlige og ikke-statlige institusjoner på ulike skalaer sammen utgjør en kraftfull påvirkning på selskapenes sosiale investeringspraksis. Han viser at en ansamling han kaller «nasjonale interesser», består av ukoordinerte, differensierte interesser som likevel sammen utøver et kollektivt press på norske selskaper for at disse skal gjøre sosiale investeringer i lokalsamfunnene de opererer i (Wanvik, 2014).

Dermed mener vi at et bevisst forhold til romlig skala er nødvendig for å kunne begrepsfeste hvordan ulike institusjonelle, juridiske og geopolitiske forhold former råvaresoner som steder. I samfunnsgeografien har skala blitt forstått både som mentale kategorier for å organisere sosiale, kulturelle og politiske fenomener og som eksisterende materielle romlige enheter (Herod, 2011). De vanligste skalakategoriene er lokal, regional, nasjonal, internasjonal osv., og et særtrekk ved samfunnsgeografien er å forstå disse som sammenhengende og gjensidig avhengige (Haarstad, 2014a).

Makt

Vi har sett at steder formes av materielle forhold, relasjoner og nettverk på tvers av ulike geografiske skalaer, men i råvaresoner er det spesielt tydelig at enkelte relasjoner er mer globaliserte og grenseoverskridende enn andre. Studier av ressursutvinning peker ofte på maktforhold, ulikheter og konflikt mellom borgere og stat, mellom lokalsamfunn og bedrifter, mellom fagforeninger og arbeidsgivere (se for eksempel Miller, 2003; Bridge, 2004; Ong, 2006; Bebbington, Hinojosa, Bebbington, Burneo & Warnaars, 2008; Bickerstaff & Agyeman, 2009; Allen, 2011a; Sasson & Blomgren, 2011; Bergstrom, Goetz & Shortle, 2013). Som flere studier har poengtert, henger evnen og muligheten til å knytte relasjoner utover stedet og utover landegrenser tett sammen med makt og gjennomslag i økonomiske og politiske konflikter (Haarstad & Fløysand, 2007). Dette betyr ikke at makt «flyter» sømløst rundt i nettverk, men at aktører med tilgang på utstrakte nettverk ofte er i stand til å bruke disse til å mobilisere materielle og diskursive ressurser og dermed påvirke hendelser på spesifikke steder. Dette er i tråd med Allens (2011a, 2011b) maktbegrep, som vi ser på som godt egnet til å informere et skalert eller flerdimensjonelt stedsperspektiv. For Allen er ikke makt noe som er iboende i aktører eller institusjoner, der noen har mer makt enn andre. Makt er heller ikke et nullsumspill, der en gitt mengde makt er fordelt mellom ulike spillere i en konflikt. For Allen er makt et topologisk fenomen, hvor aktører søker allianser på tvers av skala og nettverk og romlig distanse og mobiliserer ulike former for materielle og/eller diskursive ressurser i sine forsøk på å realisere sine mål.

Ved å analysere steder ut fra sosiale og materielle komponenters skalaovergripende mobilisering av ressurser, nærmer vi oss et flerdimensjonalt stedsbegrep. Vårt argument så langt er altså at for å analysere råvaresoner som steder trenger vi en teoretisk tilnærming som bygger på samfunnsgeografiens tenkning rundt sted, men som supplerer eller refokuserer denne for å understreke og ivareta tre relaterte aspekter på en helhetlig måte: Først et *materialitetsaspekt*, for å synliggjøre det som i det hele tatt er utgangspunktet for hvorfor råvaresoner finnes der de er, og hvordan slike råvaresoner omformes rent fysisk og visuelt som følge av utvinningen, og hvilke konsekvenser dette har. Så et *skalaaspekt*, for å synliggjøre relasjonenes romlige utbredelse, sammenhenger og konsekvenser. Og til slutt et *maktaspekt*, for å synliggjøre at enkelte aktører på stedet har bedre muligheter til å knytte relasjoner utenfor stedet og mobilisere materielle og/eller diskursive ressurser enn andre. Vi mener en slik tilnærming kan bindes sammen i et rammeverk som trekker på Manuel DeLandas teorier om ansamlinger (assemblages), med andre ord: en tilnærming om *råvaresoner som ansamlinger*.

Steder som ansamlinger

Ansamlingsteorien bygger på teorier om kompleksitet og ulike bølger av sosial konstruktivisme og diskursive tilnærminger til filosofi og samfunnsvitenskap beslektet med nyrealisme (Anderson mfl., 2012). Den har etter hvert fått stor plass i sosial teori, delvis som følge av den ontologiske vendingen og arbeidet til Manuel DeLanda, som ved sin nytolkning og pedagogiske fremstilling av tekstene til Deleuze og Guattari og andre har gitt nytt liv til det filosofiske fundamentet.

Ansamlinger kan forstås som en helhet skapt av ulike sammenstillinger av heterogene bestanddeler og relasjonene mellom dem (DeLanda, 2006). Et hovedpoeng med denne tilnærmingsmåten er at den utfordrer vår vante oppfatning av hva som er en sosial enhet. Ansamlingsteorien peker på at i virkeligheten er disse enhetene satt sammen av mange mindre enheter, og at de dessuten ikke kan forstås isolert fra andre enheter. Enhetenes handlinger og effektene av disse kan ikke forstås separat fra samspillet med andre enheter. Derfor er en sosial enhet egentlig det større hele som utgjøres av interaksjonen mellom mindre bestanddeler, og som selv samtidig inngår i større konstellasjoner. Ansamlingsteorien gir oss en teoretisk inngang til å forstå dette samspillet.

Et viktig motiv bak begrepsapparatet er å unngå de statiske og rigide kategorier vi er vant med, og heller fremstille samfunnet slik det fremstår: komplekst og i stadig endring. DeLanda understreker ansamlingenes potensial for endring heller enn deres mer eller mindre fasttømrete egenskaper. Ansamlingens bestanddeler kan være av alle slags typer, både sosiale/menneskelige og naturgitte/ikke-menneskelige

(Deleuze & Guattari, 1988; DeLanda, 2006). DeLanda skiller i stedet mellom de ulike bestanddelenes materialitet (form, funksjon) og ekspressivitet (uttrykk, tegn, meningsinnhold). Han er opptatt av at relasjonene i en ansamling ikke skal bli sett på som en organisme. Man må unngå organismemetaforen fordi den fremstiller ansamlingen som mer sammenfattet og stabil enn den egentlig er (Anderson mfl., 2012). De ulike komponentene i en ansamling er involvert i prosesser som både konsoliderer (territorialiserende prosesser) og oppløser ansamlingen (deterritorialiserende prosesser) (Palmås, 2007). Teorien unngår dermed en vanlig fallgruve i studier av samfunnet, nemlig at studieobjektet blir fremstilt som mer enhetlig og konstant enn det er i virkeligheten.

Samtidig er det ikke slik at en ansamling er en tilfeldig sammenstilling av individuelle komponenter (altså kun en samling). Relasjoner og kausale effekter går på tvers av de ulike komponentene i en ansamling, det være seg ekspressive eller materielle. Ansamlinger er selvorganiserende og blir ikke styrt av noen sentral kraft, verken nedenfra og opp eller ovenfra og ned – det er derimot *interaksjonene mellom bestanddelene* som driver prosessene i og mellom ansamlinger (DeLanda, 2006). Slik anerkjenner DeLanda geografiens relasjonelle perspektiver, samtidig som han understreker at bestanddelene eksisterer uavhengig av begrepene vi har om dem (noe som gjenspeiler en klassisk læresetning fra realismen). For å forene disse to tilsynelatende selvmotsigende posisjonene mener DeLanda at vi trenger et realistisk begrep for årsaker ikke som *sammenhenger*, men som faktiske *forbindelser*, hvor én hendelse produserer en annen hendelse, altså som aksjon–reaksjon heller enn som en motivert og intensjonell årsak–virkning-sammenheng.

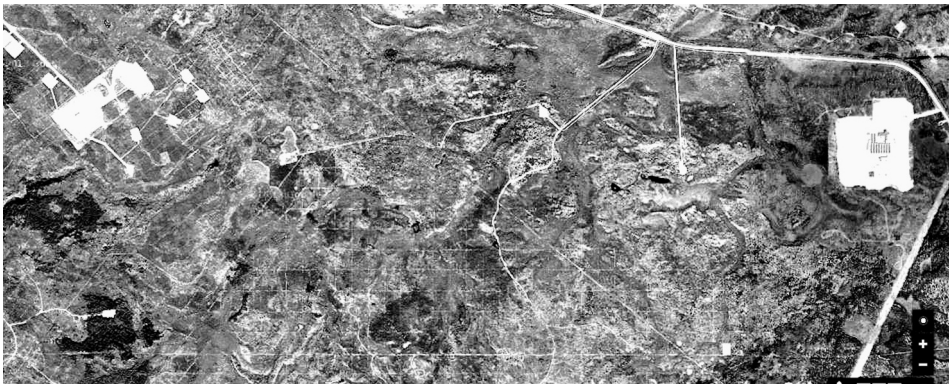
Flere geografer har i senere år brukt ansamlingsbegrepet (se for eksempel Bickerstaff & Agyeman, 2009; McFarlane, 2009; Featherstone, 2011; Dittmer, 2014; Wanvik, 2014). Som Escobar (2007) sier, har ansamlingsbegrepet et mer komplekst og fleksibelt forhold til skala enn tradisjonelle tilnærminger. En grunn til at geografer har funnet nytte i å snakke om ansamlinger, er at man kan koble innsikter fra flere ulike romlige begreper uten å bli bundet av den konseptuelle «bagasjen» de har med seg (Jessop, Brenner & Jones, 2008). Man kan sette sammen innsikter fra diskusjoner rundt stedsbegrepet, trekke på skaladiskusjonen og snakke om nettverk i stedet for å godta *a priori* de nedarvede relasjonene mellom disse begrepene. Slik Jessop og medforfattere (2008) argumenterer for, bør vi ikke gi forrang til enkelte sosiorom-lige relasjoner eller begreper, men heller ha hele den geografiske begrepsverktøykassen tilgjengelig og bruke de begrepene som er nyttige i en gitt analyse. *Makt* utøves i relasjoner mellom ansamlingenes bestanddeler. Den finnes ikke iboende i en enkelt bestanddel, som et multinasjonalt oljeselskap, men utøves ved at aktører mobiliserer spesifikke relasjoner (Allen, 1997, 2003) og dermed beveger ansamlingen som helhet. *Skala* er ikke en enkel hierarkisk stige der øverst betyr mektigst, men en kompleks romlig struktur som kun kan forstås gjennom andre sosiorom-

lige begreper, som for eksempel nettverk. Og *materialitet* er ikke eksternalisert, men alltid konstituerende for det sosiale.

Det ansamlingsteorien i bunn og grunn inviterer oss inn i, er en disseksjon av maktforhold og påvirkninger. Ansamlingsteori anerkjenner og omfavner konflikt, friksjon og transformasjon som avgjørende drivkrefter i sosioromlig interaksjon. Den gir en inngang til å forstå hvordan makt og innflytelse beveger seg mellom aktørene i et gitt sted eller hendelse. Siden de sentrale teoretikerne fremhever ansamlingens ustabilitet som dens fremste kjennetegn, er det empirien som i stor grad setter rammene for hva som er undersøkelsesobjektet (Wanvik, 2014). Selve ansamlingen unnslipper klare avgrensninger og definisjoner av den enkle grunn at den ikke er koordinert eller strukturert i et klart hierarki av enheter, men identifiseres primært ved de territorialiseringsprosessene som foregår i randsonene av ansamlingen (DeLanda, 2006). Vi må granske prosesser, identifisere endringsprosesser og/eller konserverende prosesser innenfor og mellom ansamlinger både i tid og rom.

Råvaresonen som ansamling

I vårt eksempel er «lokasjonen» ensbetydende med området i og rundt landsbyen Conklin, en ødemark og et kryss i nordøst-Alberta, hvor det statseide norske oljeselskapet Statoil har funnet olje. Der er skog så langt øyet kan se, og området befolkes hovedsakelig av en liten urfolksgruppe av métis[4], men er også tradisjonelt jaktterreng for urfolksgruppene Beaver Lake Cree og Chipewayan Prairie, Chard (Janvier) métis, Anzac og Fort McMurray No. 468 (Statoil Canada, 2007; Aboriginal Affairs and Northern Development Canada, 2010). Området har et rikt dyre- og planteliv og mange vakre innsjøer.



Figur 1: Seismikklinjer i landskapet.

[4] Métis: Urfolk med blandet europeisk og indiansk opphav.

I tillegg til Statoil opererer et titalls andre canadiske og utenlandske oljeselskaper i området, og sett fra luften kan man observere hvordan seismikklinjer, veianlegg og oljebrønner kutter landskapet på kryss og tvers over enorme områder.

Møtene mellom ulike ansamlinger er en kritisk fase mettet med spenninger og friksjoner, der stabiliserings- og destabiliseringsprosesser er mest hyppige (se for eksempel Bridge, 2001, 2004; Tsing, 2005; Bebbington mfl., 2008). For å identifisere ulike ansamlinger er det dermed fruktbart å lete etter konflikter og interessemotsetninger. Råvaresoner er en arena for slike møter og spenninger, og ansamlingsteori blir dermed et nyttig verktøy for å forstå råvaresonen som sted.

Oljeansamlingen

Slik enhver ansamling består av flere ansamlinger (DeLanda, 2006), utgjør råvaresonen en ytterst ustabil og sammensatt ansamling, hvori flere mer eller mindre tydelig skalerte og avgrensete (territorialiserte) ansamlinger kjemper om makt og ressurser. I Conklin kan vi ved første øyekast identifisere to ansamlinger som setter sitt preg på råvaresonen som sted, og som både er en del av sonen, og samtidig sprenger konvensjonelle forestillinger om hva som umiddelbart avgrenser den. Den mest iøynefallende er oljenæringens interessefellesskap, la oss kalle den «oljeansamlingen», som strekker seg langt ut over selve råvaresonen. Med sine lete- og produksjonsaktiviteter preger de særlig de materielle delene av området, men også de fleste sosiale aktivitetene som foregår i området, bærer preg av oljeinteressene. 81 prosent av Conklins arbeidsføre befolkning jobber i oljerelaterte næringer (Regional Municipality of Wood Buffalo, 2012), store arbeiderbrakker er reist og spredt utover terrenget, et nytt hotell har sett dagens lys midt i krysset som kalles Conklin Corner, og hos landhandleren selger de T-skjorter og caps med påskriften «I survived Highway 881», som for å understreke hvor stor trafikkpåkjenningen er i området.

Men oljeansamlingen strekker seg langt ut over Conklins og Wood Buffalos beskjedne administrative grenser. Inntektene fra bitumenutvinningen har gjort Alberta til Canadas rikeste delstat (Quinn, 2014), og Canadas fremtidige inntekter avhenger i stor grad av utvinningsaktivitetene i Conklin og andre tilsvarende områder i delstaten. På samme tid er samtlige av oljeselskapene som er representert i råvaresonen, styrt av landkontorer enten i Calgary eller andre større byer, og disse landkontorene er igjen underlagt hovedkontorer helt andre steder, spredt over hele kloden. To vesentlige komponenter styrer imidlertid ansamlingens operasjonalitet: selve oljesanden i bakken og det globale energimarkedet. En svært energikrevende og kostbar produksjon krever høye energipriser for å være lønnsom, og dermed gjennomførbar. Slik omfatter oljeansamlingen både offentlige og private aktører, og materielle og diskursive komponenter, på nær sagt alle skalaer i et system av administrative og organisatoriske koblinger.

Figur 2a og 2b: Oljeansamlingen setter sitt preg på landskapet.

Oljeansamlingen som sådan er pragmatisk sett enkel å identifisere, og man kunne komme langt ved å anvende kun nettverksteori eller skalateori for å vise dens eksistens og virke. Det som imidlertid er frigjørende med ansamlingsteori, er erkjen-

nelsen av at det er i interaksjonen med andre ansamlinger – i friksjonen og konfliktene – at energien finnes, der hvor slagene om ansamlingenes identitet og atferd står. Heri ligger nøkkelen til å forstå råvaresonen som sted: som dynamikk, ikke som permanens. Så hvilke andre ansamlinger kan sies å operere i råvaresonen Conklin? Hvilke konflikter og interessemotsetninger kan vi spore?

Miljøansamlingen

Går vi inn mellom seismikklinjene og de endeløse rekkene av barnålstrær og myrlandskap, finner vi menneskene som en gang var ganske alene om å befolke dette området. Métis er urfolk som stammer fra sammenblandingen av urfolksgrupper og franske pelsjegere og andre europeiske omstreifere. Disse har bodd i Conklin-området siden tidlig 1900-tall og har i all hovedsak levd av jakt, fiske og fangst (White mfl., 2012). Ser vi nærmere etter, finner vi også dyreliv, bær, urter, innsjøer og elver og fisk. Vi vil finne rester av fangstplasser og -hytter, snarer og feller, stier og kanoer.

I dag er disse ressursene under sterkt press, og lokalbefolkningen har i stor grad lagt vekk sine tradisjonelle praksiser. Viltet forsvinner og endrer migrasjonsmønster, elver og innsjøer kontamineres av forurensing, og fiskebestanden reduseres. I takt med verdens inntog i dette lille samfunnet er heller ikke urfolks tradisjonelle levesett så fristende lenger, og gruppens eldste medlemmer ser sine gamle tradisjoner og verdier smuldre opp rundt seg (White mfl., 2012).

Denne situasjonen er ikke unik for Conklin, og ansamlingen som vi her aner konturene av, la oss kalle den «miljøansamlingen», består av en rekke aktører både lokalt i Conklin, i det canadiske samfunnet og i utlandet, som berøres av hvordan oljeindustrien påvirker naturområder og forandrer levesettet til gamle kulturer. Miljøansamlingen har også knyttet til seg et til dels svært omfattende nettverk av miljø-, urfolks- og utviklingsorganisasjoner både i og utenfor råvaresonen. Sågar norske urfolksgrupper har engasjert seg i rettsaken som Beaver Lake Cree har reist mot den canadiske staten for brudd på grunnloven ved å dele ut 17 000 lisenser i gruppens tradisjonelle jaktområder. Noen av disse lisensene tilhører nå norske Statoil, som har høstet mye kritikk for sin aktivitet i utvinning fra bitumen. Blant annet har frivillige organisasjoner i Norge, inspirert av motstanden i Conklin og andre steder i Canada, startet «Vi eier Statoil»-kampanjen, med det eksplisitte formål å få Statoil ut av «tjæresanden» i Alberta (WWF Norge, 2010).

Oljeansamlingen: Konsolidering og inkludering

Så langt har vi identifisert to motstridende interesser internt i råvaresonen, og vi har sett hvordan disse interessene er skalert, og hvordan aktørenes aktiviteter lokalt i Conklin kan påvirke aktiviteter så langt unna som i Norge. Men dette er da geografisk og annen akademisk litteratur breddfull av eksempler på fra før. Hvordan skal ansamlingsteori bringe oss videre i analysen av råvaresonen som sted og hjelpe oss å forstå nye norske kontekster rundt våre transnasjonale operasjoner? Vi skal nå se hvordan ansamlingene mobiliserer for å styrke sine posisjoner, eller sagt med DeLandas vokabular: Hvordan de gjennom territorialiseringsprosesser (alliansebygging og mobilisering) søker å konsolidere sine posisjoner, og hvilke konsekvenser dette har.

Der nettverksteori, skalateori og maktteori isolert sett slår seg til ro med å definere partene i en konflikt og analysere spillet mellom disse, vil vi hevde at ved å anvende et analyseapparat fra ansamlingsteori, vil vi få helt nye innsikter i hvilke prosesser som i vårt tilfelle former råvaresonen Conklin som sted, og som dermed kan bidra til å forstå hvilke kontekster norske selskaper beveger seg inn i når de etablerer operasjoner under fjerne himmelstrøk.

For i Conklin utkjempes det åpenlyse kamper om ansamlingenes identitet og legitimitet, og dermed om identiteten til råvaresonen som sted. Oljeansamlingens territorialiseringsprosesser er todelt: både *kontroll* og *inkludering*. Gjennom søknadsprosessen og lisensutdelingen tar oljeansamlingen kontroll over storparten av informasjonsgrunnlaget for hele råvaresonen. En svært detaljert og omfattende miljøkonsekvensanalyse gjennomføres av selskapet før man får gå i gang med utvinning (Statoil Canada, 2007). Her kartlegges prosjektets miljømessige og sosiale konsekvenser for omgivelsene. Oljeselskapene jobber i tillegg hardt, i samarbeid med provinsmyndighetene, gjennom sosiale investeringer, royaltyavtaler og lokale kontrakter til underleverandører, med å inkludere flere grupper i ansamlingen og slik sikre seg støtte og arbeidsro rundt ansamlingen. I Conklin har Cenovus Energy Inc., en av Statoils konkurrenter, inngått en kompensasjonsavtale med de ca. 300 medlemmene av métis-bosettingen, verdt 40–60 millioner amerikanske dollar over de neste 40 årene (Cattaneo, 2011). Statoil på sin side har iverksatt sosiale investeringsprogrammer med flere av gruppene i råvaresonen, som innbefatter utdanningsprogrammer, jobbskaping, fritidsaktiviteter, kartlegging av historiske rettigheter og tradisjonelle praksiser, miljømålinger m.m. (Statoil Canada, 2007, 2013).

Utenfor Conklin skjer det også tilsvarende territorialiseringsprosesser i randsonene av oljeansamlingen. De canadiske tilbakeføringsmekanismene for uttak av ressurser fra lokalsamfunn har sørget for relativt sett enorme inntekter til delstatsnivået (Quinn, 2014), og kontrakter inngått med lokale næringslivsaktører

holder liv i mange lokalsamfunn over hele Alberta, inklusive urbefolkningsgrupper. I tillegg inngås kompensasjonsavtaler, royalties og sosiale investeringsprogrammer med lokale urfolksgrupper i et stadig økende omfang (Caine & Krogman, 2010; Vandament, Brunnen & Kmiec, 2012). Disse sosiale investeringene truer enheten i miljøansamlingen, ikke bare lokalt i Conklin, men også nasjonalt og internasjonalt, siden ansamlingen er avhengig av legitimitet fra grupper inne i selve råvaresonen. Nærmere 80 prosent av den canadiske befolkningen er positive til oljeutvinning i Alberta (Leger Marketing, 2012), og særlig den canadiske urbefolkningens *samlete motstand* mot oljeutvinningen er en sannhet med store modifikasjoner (Cryderman, 2013). Ved å delegere store deler av konsultasjonsprosessen med urfolk til de store oljeselskapene og slik åpne for omfattende private, konfidensielle kompensasjonsavtaler mellom disse gruppene og selskapene (Alberta Energy Regulator, 2015), har delstatsregjeringen skapt deterritorialiseringseffekter og slått sprekker i en av miljøansamlingens viktigste narrativer: urfolkenes bekymring for sine tradisjonelle landområder.

Dermed splittes urfolksgrupper på tvers av interesser og familier mellom de yngre medlemmene, som ikke har samme preferanser for natur og tradisjonelle jakt og fangstpraksiser, og de eldre, som ser sitt gamle levesett forsvinne og bli glemt (Alberta Oil Magazine, 2014). Oljeansamlingens kontroll over miljødata samt deres samlete ressurstilgang og vilje til å bruke disse ressursene til å knytte til seg flest mulig andre aktører både innenfor selve råvaresonen og i randsonene, utgjør en avgjørende maktfaktor i råvaresonen. (For utdyping av dette poenget, se for eksempel Davidson & MacKendrick, 2004; Gregory & Trousdale, 2009; Caine & Krogman, 2010.)

Miljøansamling under press

Hva så med territorialiseringsprosesser hos miljøansamlingen? Hva har denne å stille opp med lokalt i Conklin, og hvordan konsoliderer og utfordrer den? Urbefolkningsgruppene som bor i råvaresonene, har gjennom sin kamp mot koloniseringen av sine gamle territorier definert seg selv nettopp i relasjon til jorda og naturen (Alfred, 2009). Hele deres eksistens og egenart har, både av det hvite Canada og dem selv, vært definert av tradisjonell høsting av naturens overskudd. Utvinningsindustriens materielle konsekvenser griper således direkte inn i selvforståelsen og definisjonen av hele urfolkskomplekset i Canada. «The environment is not something separate from our people: it's a part of us» (høvding Allan Adams, Athabasca Chipewyan First Nation, intervjuet i Alberta Oil Magazine, 2014).

I Conklin har flere urfolksgrupper jobbet med å dokumentere sine tradisjonelle praksiser og arealbruk (Chipewyan Prairie Dené First Nation, 2007; White

mfl., 2012). Slike rapporter er ofte vesentlige bidrag til rettsvesenets behandling av rettighetsspørsmål og industriens håndtering av konsultasjonsprosesser i forbindelse med oljeutvinning (Vandament, Brunnen & Kmiec, 2012). Slik formaliserer miljøansamlingen sin territorialisering ved å nedtegne tradisjonell arealbruk og gjøre hevd på områder som er under press fra oljeansamlingen. En del urfolksorganisasjoner reterritorialiserer sågar sine posisjoner ved å forsterke sine tradisjoner og levesett som en motmakt mot oljeansamlingens fremferd, men også som et bolverk mot egne ungdommer som påvirkes av oljeansamlingens territorialiseringsstrategier og jakter nye inntektsmuligheter for seg og sine familier blant oljeselskapene. Slik ser vi at posisjoner forsterkes i allianser mellom ulike aktører på tvers av skalaer og nettverk, men også at de skifter og reforhandles som en følge av møtene mellom ulike grupper og ulike komponenter, det være seg menneskelige eller ikke-menneskelige aktører i og rundt råvaresonene. Samtidig er disse tradisjonelle arealbruksrapportene ofte finansiert delvis av oljeselskapene som et ledd i deres forpliktelser til å kartlegge alle miljøkonsekvenser og sosiokulturelle konsekvenser av sin virksomhet. Dermed blir også dette våpenet et tveegget sverd for miljøansamlingen.

Det er liten tvil om at oljeansamlingen, med både oljeselskaper og provinsmyndigheter i spissen, kan si akkurat det samme som Chief Adam: Naturen spiller en helt avgjørende rolle i oljeansamlingens selvforståelse og eksistens. Naturens rolle kan dermed tolkes ulikt inn i de to ansamlingenes territorialiseringsprosesser: Oljeansamlingen viser til hvor lite naturmiljøet «i realiteten» påvirkes, hvor positive effekter oljeutvinningen og selskapenes virksomhet vil ha for området, og hvilke planer de har for å gjenoppbygge naturen etter produksjonen er avsluttet. Miljøansamlingens representanter lokalt viser på sin side hvordan deres tradisjonelle praksiser er blitt umuliggjort av manglende vilt, nedgang i fiskebestandene, tap av rent drikkevann og begrenset bevegelsesfrihet (White mfl., 2012).

Konklusjon

De nye 'lokasjonene' som skapes av den norske oljeindustrien, utfordrer våre forståelser av vår nasjonale geografi. Vårt nasjonale oljeselskap, opprinnelig grunnlagt for å være et instrument for å la det norske folk ta del i oljerikdommen på norsk sokkel, er nå med på å skape steder langt utenfor landets grenser. Som geografer kan vi bidra til å forstå disse stedene og prosessene som former dem.

Vårt hovedargument her er at ansamlingsteorien, koblet sammen med geografiske begreper som *sted* (Massey, 1999), *skala* (Haarstad, 2014b) og *makt* (Allen, 2011a, 2011b), er en fruktbar teoretisk innfallsvinkel for å gripe denne kompleksiteten som skaper råvaresoner som steder. Manuel DeLanda (2006) skriver at ansam-

lingsteorien understreker verdens reelle kompleksitet, og at det er ansamlingenes ustabilitet, konflikter og transformasjoner som skaper energi og gir teorien legitimitet og styrke. Nye norske kontekster, her oljeselskapet Statoils 'lokasjon' i råvaresonen Conklin, er nettopp en slik ustabil størrelse, en ansamling preget av indre motsetninger og interessekonflikter mellom komponenter som igjen er ansamlinger på tvers av skala. Disse motsetningene skaper spenninger som igjen utløser ulike reaksjoner og transformasjoner innen og mellom to analytisk identifiserte ansamlinger: oljeansamlingen og miljøansamlingen. Slik spiller både makt, nettverk, skala og materialitet helt avgjørende roller i kampen om ressursene i råvaresonen og dermed også i definisjonen og forståelsen av råvaresonen som sted. Dermed blir vårt bidrag til stedsteorien todelt: Vi får konkretisert hvilke faktorer som er avgjørende for å forstå råvaresonene som steder, samtidig som vi utstyrer DeLandas ansamlingsteori med noen operasjonelle, analytiske kategorier som gjør den anvendelig når geografer skal forske på råvaresoner og andre steder.

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PAPER #2

Article

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Carbonscapes and beyond: Conceptualizing the instability of oil landscapes

Håvard Haarstad and Tarje I. Wanvik
University of Bergen, Norway

Abstract
Geographers tend to see energy systems as intricately interwoven with society and relatively resistant to change. We argue that there is a danger of exaggerating the permanence and stability of the energy–society relationship. Therefore we propose a framework that is more open to instability and transformation. Using assemblage theory, we frame the social and material landscapes of oil – carbonscapes – as having emergent capacities for change built into their relations of exteriority. We illustrate this by discussing instabilities at particular points within the global oil production network: extractive hot zones, energy distribution infrastructures, and urban spaces of consumption and practice.

Keywords
assemblage, carbonscape, energy, instability, materiality, oil

I Introduction

To most geographers concerned with energy, evidence of our dependence on fossil fuels is everywhere. This is despite recent rapid developments in renewable energy technologies, coal divestment campaigns, evidence of 'peak car' trends, ambitious new emissions targets in major cities and oil price volatility. According to recent geographical and social science scholarship (e.g. Urry, 2013, 2014; Huber, 2013; Watts, 2013), the political and material landscapes of our fossil fuel society are as robust as ever. Much of our built environment has been constructed around energy matrices of affordable and abundant petroleum, which in turn steers and regulates energy-related behaviour. These landscapes have certain visible and obvious artefacts signalling the centrality of oil to our economy and culture, such as gas stations, oil rigs, tankers, pipelines and extraction sites. Hegemonic social and cultural artefacts embed fossil consumption in our lives, such as symbolism attaching car ownership to freedom and success. This means that the barriers to low carbon transition are not just technical or financial, they are also mind-sets and socio-cultural practices. As Matthew Huber puts it in his recent book *Lifeblood*, the main barrier to change is 'the *cultural and political structures of feeling* that have been produced through regimes of energy consumption' (2013: 168, our emphasis).

In turn, the interweaving of material, social and cultural forms and artefacts creates solid structures of 'petroculture' (Marriott and

Corresponding author:
Håvard Haarstad, Department of Geography, University of Bergen, Norway.
Email: havard.haarstad@uib.no

Minio-Paluello, 2012), 'fossil capitalism' (Huber, 2013; Watts, 2013), 'carbon lock-in' (Unruh, 2000) or 'carbon democracy' (Mitchell, 2011). Urry (2014: 3) suggests that energy systems and their lock-ins are 'not subject to simple human intervention and control'. Not all accounts are dystopian, but in much of the geographical and social science scholarship there is a clear tendency to stress path dependencies and inertia that shape society's relationship with energy (Shove et al., in press; Bulkeley et al., 2013, 2014; Rutherford and Coutard, 2014; Hodson and Marvin, 2010; Bridge et al., 2013; Calvert, 2016). Calvert (2016) suggests that in the recent revitalization of energy geographies, there has been a greater stress on the political, economic, technological and cultural work done to establish and maintain energy systems. We argue that the stability and permanence of society's relationship with carbon tends to be exaggerated.

While there are obvious structures of inertia and permanence, the carbon–society linkage is also characterized by rupture, unpredictability and instability. Yet existing theoretical analyses often employ frameworks that are embedded in systems thinking, in which the parts are imagined to be closely co-articulated and co-dependent. It is worth debating whether the popular vocabulary of 'regimes' and 'lock-in' has certain debilitating effects and whether we should pay more attention to volatility and change. If not, we would suggest there is a danger that we reproduce the narrative of the inevitability of oil that the fossil fuel industry has carefully constructed. We will also miss important opportunities to sharpen conceptual frameworks in energy geography.

The aim of this article is to conceptualize the socio-material landscapes created by fossil-based energy systems in ways that are open to appreciating their instabilities and identifying windows for transformation.

We use the term 'carbonscape' to describe the theoretical and conceptual concerns at hand. Carbonscapes, then, are the spaces created by material expressions of carbon-based energy systems and the institutional and cultural practices attached to them. As many theorists have alluded, carbonscapes are shaped at the intersection of infrastructures, technologies, the built environment and various social, cultural and political regimes that govern them (Rutherford and Coutard, 2014; Huber, 2013; Urry, 2013, 2014; Mitchell, 2011; Watts, 2013). While a common theoretical stance is to depict the co-articulation of these elements as a coherent totality or as a stable organic whole, we want to theorize carbonscapes as more contingent. Assemblage theory, which is gaining ground in geography, provides us with a set of conceptual tools with which to achieve this. It promotes an ontology that dismisses the idea of systems as stable, organic wholes in favour of an ontology of *entities without essence* that are held together in more or less impermanent relationships. Seeing carbonscapes as singular, coherent systems makes it difficult to appreciate change, because many co-dependent parts have to change at the same time. In thinking in terms of assemblages, however, we illustrate how carbonscapes are composed of various interrelated parts subject to change and destabilization through their involvement with other assemblages. This enables us to appreciate changes and ruptures that may not overthrow 'the system as a whole', but nevertheless represent significant change.

Our argument is organized in the following four sections. In Section II, we discuss theoretical approaches to three different types of carbonscapes: energy production, energy distribution infrastructure, and spaces of consumption and practice; we hold that these prevailing theoretical frameworks overemphasize their permanence. In Section III, we begin conceptualizing the instability of carbonscapes and outline how concepts from assemblage theory can be helpful. Section IV exemplifies relationships between stability and change in the three different types of carbonscapes. Section V

concludes by reflecting on the role of instability in our understanding of the geography of energy.

II Geographies of stability and change in fossil society

Several commentators have recently noted the re-emergence of energy as a concern for geographers (Bridge et al., 2013; Calvert, 2016; Pasqualetti and Brown, 2014; Zimmerer, 2011). There also appears to be corresponding and relevant trends in related fields outside of geography, such as anthropology (Boyer, 2011), sociology and critical theory (see special issue of *Theory, Culture, & Society*, 2014, vol. 5, issue 3) and history (Kander et al., 2014). Even though 'energy geography' can be considered a distinct subfield of geography (Calvert, 2016), it is informed by a wide range of scholarship. Geographers have typically had much to say about the landscapes and material artefacts around energy and resource sectors. Energy is also a key topic of enquiry in studies of natural resources, political economy, cities and other interrelated fields (Bakker and Bridge, 2006; Calvert, 2016).

A central claim for geographers has been that resources and energy should be understood as interconnected networks tying together sites and scales, e.g. through a commodity chain framework (Bridge and Le Billon, 2013; Bridge, 2008). In turn, debates in the literature about material geographies of fossil society have been concerned with all points along this chain, including, first, spaces of extraction and energy production (or what we will later term 'extractive hot zones'), second, infrastructures for energy transport and distribution and, third, the urban spaces of consumption and practice. What is typical about these perspectives is that energy and resource regimes are seen as materializations of different types of power and, despite involving tensions and contentious politics, are quite resistant to change.

First, on the spaces of extraction and energy production: many geographical and critical analyses have either implicitly or explicitly been developed as a critique of the mainstream and hegemonic 'resource curse' literature. Literature on 'the curse', dominated by economics and political science, has seen extractive spaces as cursed by economic and political processes at the national scale (see for example Mehlum et al., 2006; Humphreys et al., 2007). Geographers, anthropologists and others have argued that the malaises of many extractive spaces are far more complex and must be understood in terms of both skewed distribution of costs and benefits locally, enclave formation and spaces of enclosure, and unequal integration with the global political economy of oil (Haarstad, 2014b; Logan and McNeish, 2012; Bebbington et al., 2008; Stevens and Dietsche, 2008; Kirshner and Power, 2015). Yet in broadening out the scope and complexity of the processes underlying 'the curse', geographers tend to deepen the view of the grip that oil extraction has on social development trajectories. Watts (2004), for example, has suggested that we should be attentive to how oil is 'inserted into an already existing political landscape of forces, identities and forms of power' (2004: 76). Elsewhere he draws attention to the global regime of accumulation that envelops oil extraction (Watts, 2013).

The operative perspective in this literature is typically that the local extraction spaces (and their patterns of underdevelopment, inequalities and environmental disruption) are intricately embedded in the broader political economy: multi-scalar complexes involving oil companies, political institutions and more. Much of this work is quite convincing, and foregrounding the power structures of the global regime of oil is an important part of its rationale. Yet in this sense it tends to present an image of relative stability and resistance to change, as local dynamics are closely embedded within the globalized regime. Even though the contentious politics of social movements and civil society

always remain part of the picture (see Bebbington et al., 2008; Perreault, 2006), the general perspective seems to be that the hegemony of oil capital is able to destabilize and undercut serious challenges to continued accumulation.

Second, many geographers and social scientists have looked at how the infrastructures through which energy and resources are distributed and transported shape relations of power. As Urry (2014), Mitchell (2009), Shove and co-authors (in press) and others have observed, energy infrastructures can be investigated for how they create order and embody particular forms of authority both through the 'things' that are necessary for them to function and through the discourses and practices that surround them. Their accounts have recognized that power relations are embedded both in the minuscule or 'background' material artefacts in society, or 'boring things', as Star (1999) labels them, as well as in larger machines and structures of modern culture (Winner, 1980). Social orders are not only a result of institutional and political practices but also, as Winner puts it, of 'tangible arrangements of steel and concrete, wires and transistors, nuts and bolts' (Winner, 1980: 128). By emphasizing the way inert infrastructures steer practices, this perspective also foregrounds stability and resistance to change.

Mitchell's work on 'carbon democracy' is particularly instructive in showing how the different infrastructures in use for large-scale distribution of coal and oil have effects on political practices. These two different types of energy sources (coal being solid with low energy intensity, oil being liquid with high energy intensity) require very different types of infrastructure, and these different infrastructure regimes have had correspondingly different political effects. Oil could be produced and transported in ways far less conducive to pressure from organized labour. Whereas the movement of coal tends to follow the centric networks of rail lines, with potential choke points at several junctures, oil flows more like a grid, with more than one possible path and where blockages are more difficult (Mitchell, 2009). Similarly, Marriott and Minio-Paluello's description of the oil road between the Caspian Sea and central Europe frames large-scale infrastructure as the underpinning of power relationships of modern society. These power relationships, they claim, 'resist any shift away from this petroculture' (Marriott and Minio-Paluello, 2014: 83). These writers are certainly interested in social and political change. But by stressing the co-articulation of material infrastructures and political power, this change tends to be conditioned upon structural shifts in the broader energy system.

This insistence upon reading socio-political orders out of infrastructure is suggestive of Foucault. Indeed, these writers often employ Foucaultian notions of governmentality and biopower, again emphasizing the co-articulation of energy-related infrastructures with socio-political orders. For instance, Boyer (2014) proposes a theoretical entanglement of Foucaultian biopower with 'energopower', the harnessing of electricity and fuel for social purposes. Strengers (2013) stresses the way 'smart' energy technologies involve a particular discursive subject formation around 'energy-rational man'. In broad terms, the Foucaultian-inspired assessment of energy infrastructure stresses how power and authority are built into its material and social forms.

This is effective at revealing how both 'big' and 'small' infrastructural artefacts create and underpin social orders and regimes. Yet it is not easy to envision potentialities for change in these perspectives. Biopolitical regimes are portrayed as inherently stable. Instability, contingency and sites of contestation are difficult to identify. Episodes of systemic disruption (such as a blackout) are typically understood to reveal our thorough and complete dependence on the infrastructure system.

Third, we turn to sites of consumption and practice, in particular how oil and energy is

embedded in cities and urban technologies. Energy consumption is closely related to urban form and planning regimes (Newman and Kenworthy, 1989; VandeWeghe and Kennedy, 2007). Geographers have often understood cities as spatial and material expressions of particular energy regimes (Calvert, 2016; Rutherford and Coutard, 2014). Therefore, studying cities is a way to unpack society's relationship with energy. In *Lifeblood*, Huber (2013) examines how petroleum has shaped recent American history and landscape, and links the rise of the new right to the growth of a sprawling suburban landscape conducive to individualist, entrepreneurial rationality. Echoing Mitchell's (2009) call to 'follow the carbon', he suggests that energy provides an ecological foundation for a particular privatized socio-spatial existence and that suburban lifestyles are the spatial expression of our relationship with energy under contemporary capitalism. In his perspective, the forceful agents of change seem to be the corporate interests that have managed to deeply entangle American culture and fossil consumption throughout the 20th century.

There have also been some prominent contributions from geographers that have examined cities as sites for low-carbon transitions, approaching the work from perspectives of the various strands of socio-technical transitions literature (Bulkeley et al., 2013, 2014). Much of the sociotechnical transitions literature has evolved from a foundational paper by Rip and Kemp (1998), which takes as a starting point that established technologies are highly intertwined with 'technological regimes' (the ruleset embedded in practices, skills and procedures that mediate how specific technologies are conceived and introduced in society), and 'sociotechnical landscape' (the larger social, economic and political system in which technological innovations arrive). A key idea is that opportunities for change are fostered in protected niches, and that actual change depends on how these niches interact with broader regimes and landscapes. This basic framework has evolved into different strands – transition management, strategic niche management, the multilevel perspective on sustainability transitions, and technological innovation systems (Markard et al., 2012) – that each conceptualize relationships between stability and change in different ways. Geels (2013) suggests that cities can be considered such niches in which radical innovations take place.

Geographers have critiqued the undertheorized and unfounded spatial assumptions of the multi-level perspective (Coenen et al., 2012; Hansen and Coenen, 2015), but have also suggested ways to employ spatial vocabularies to inform perspectives on socio-technical regimes and transitions (Bridge et al., 2013). Rather than understanding radical transformations as arising in protected niches, geographers are typically more concerned with the cross-spatial and multi-scalar networks in which radical and transformative practices are engendered (Bulkeley and Betsill, 2013; Haarstad, 2014a). Yet the perspective has also been used productively in geography to theorize urban change and transformation. Bulkeley and coauthors (2013, 2014), for example, argue for a perspective on socio-technical regimes that is configured socio-spatially and structured through processes of political economy and political ecologies of infrastructure. They hold that analyses of socio-technical regime change must be understood in relation to the broader political economy of relations that go into maintaining and contesting urban infrastructures. Others have combined various metabolic and infrastructural perspectives to examine urban socio-technical regimes and how they are contested and reconfigured (McFarlane and Rutherford, 2008; Pflieger et al., 2009; Hommels, 2005).

Given the multifaceted conceptual framework it offers, it is understandable that so many are now using variations of the sociotechnical transitions literature as an inroad to analysing

processes of change. It also has some family ties to assemblage thinking, in the sense that ideas around the social construction of technology can in part be traced to Latour and actor-network theory (see Rip and Kemp, 1998), which has also stimulated assemblage thinking (Müller, 2015). But we prefer the assemblage framework to the sociotechnical transitions theory for several reasons. First, transitions theory is oriented primarily towards incremental changes that lead to systemic transitions over long time (Markard et al., 2012, state that transitions typically take 50 years or more), which overlooks the self-significance of pockets of radical transformation. Also, transitions theory is wedded to a systems perspective, which assemblage thinking attempts to break with, because in systems thinking change only becomes significant once it affects all the other elements in the system. Finally, a return to political economy and infrastructure in theorization of cities and urban low carbon transitions, which Bulkeley and co-authors (2013, 2014) argue for, is in danger of pulling us back into an emphasis on fixity and permanence. The political economy tradition in human geography has typically stressed how processes of capital accumulation shape socio-spatial change and the urban condition (Harvey, 1989). So while sociotechnical transitions literature is quite helpful in understanding cities as sites for low carbon transitions and changes in the sphere of consumption, it is not without problems. In particular, its systemic orientation prioritizes broad and long-term changes rather than specific ruptures and instabilities in cities and elsewhere.

In broad terms, central perspectives on fossil-based society tend to stress the permanence and stability of energy regimes. The works cited above are obviously not exhaustive, yet from studies ranging from the spaces of oil extraction to the distribution and transport infrastructures to the urban spaces of consumption and practice, there is a tendency to emphasize the conserving and permanence-creating forces of capital and energy materialities. Across these different perspectives, a common thread is that the socio-spatial embeddedness of energy systems creates path dependencies locking in carbon-based practices. While we largely share these observations, we have also come to think that the stability and permanence of oil landscapes tend to be exaggerated. When material infrastructures, socio-cultural artefacts and political structures are all understood as mutually reinforcing forces of conservation, the opportunities for change are difficult to identify, appreciate, and theorize. In most of the literature discussed above, a key theoretical objective has been to explain permanence and fixity rather than identifying the points of leverage for change.

Therefore, there is a need to reconceptualize the stabilities and instabilities of fossil society in ways that are open to new pathways for change and transformation. This should in no way reject the significant permanence created by the embeddedness of energy in various aspects of society – this would obviously overlook important historical experience. However, if we are to understand how stabilities interact with volatility and instabilities – which are also important aspects of historical experience – then we need theoretical frameworks that enable us to identify and analyse them.

III Conceptualizing the instability of carbonscapes

'Carbonscapes' are characterized both by path-dependencies and by rupture. The notion of '-scape' plays off of *landscape,* a term that has a long trajectory in energy geography and the wider discipline (Calvert, 2016; Zimmerer, 2011). There is also a tradition of seeing landscapes as more than material artefacts but rather as permeated by, or constructed through, social, political, cultural and economic relationships (Mitchell, 2003). As Zukin (1992: 224) has explained, landscapes are 'built around

dominant social institutions [...] and ordered by their power.' In other words, when we use the notion of 'carbonscape' to describe the relationship between energy and society, there is an explicit recognition of how social regimes and power relations create order and inertia. The apparent inertia of energy landscapes can be illustrated by Table 1, which stipulates the lifespan for different types of energy infrastructure. Much of the infrastructure central to the current form of energy production has a lifetime of more than 50 years and urban plans potentially have centuries-long lifespans. This material inertia may serve to uphold the social orders that first produced the infrastructures, as suggested by the concepts of socio-technical *regimes* and carbon *lock-in* (Coenen et al., 2012; Unruh, 2000).

At the same time, there is more to carbonscapes than inertia – volatility and change are equally important parts of the picture. Andrew Moore's photographs of the dilapidated and post-apocalyptic urban landscape of Detroit, the former Motor City of the world and (quite literally) engine of the US economy, are a reminder of that fact. (His book of photography, incidentally, is titled *Detroit Disassembled*.) As another example, the speed of technological advance and instalment of solar PV should also be considered a rapid change in global energy systems, having increased almost 70-fold from 2004 (2.6 gigawatts) to 2013 (177 gigawatts) (REN21, 2015). 'Peak car' has relatively quickly become accepted as a real trend in the US and Europe (Goodwin and Van Dender, 2013), contrary to the pessimistic prognoses of writers like Urry (2004) a decade ago. In the past few years the discourse has shifted from discussing 'peak oil' (diminishing reserves) to 'carbon bubble' and 'stranded assets' (having more oil than we can use). The petroleum economy itself is also subject to sudden jolts from unpredictable factors such as oil price instability, geopolitical threats to energy security, and terrorism. Everything seems stable, until it suddenly does not.

Table 1. Expected lifetime of energy-related infrastructure. Adapted from The Stern Review (Stern, 2007) and Wilkinson et al. (2007).

Infrastructure	Expected lifetime (years)
Urban plan	100+
Road/rail routes	100+
Hydro station	75+
Building	45+
Coal station	45+
Nuclear station	30–60
Gas turbine	25
Aircraft	25–35
Motor vehicle	12–20

Therefore, we have been wondering whether language such as 'regimes' and 'lock-in' may have certain debilitating effects. There is a danger that the resistant nature of the landscapes made by oil are exaggerated and that the theoretical frameworks available are so populated with concepts stressing inertia that instances of change are made invisible. This is a theoretical problem in the sense that we fail to theorize the relationships between stability and change properly. It is also a normative problem in the sense that we as theorists may reproduce the narrative of the inevitability of oil that the oil industry itself has so painstakingly created. The theoretical project should instead be to conceptualize carbonscapes in ways that take account of how structures of stability coexist and are interrelated with processes of change. Our intentions here resonate with J.K. Gibson-Graham's (2006) project of destabilizing imaginaries of capitalism in ways that open spaces for negotiation and contestation.

To suggest a way forward, we will draw insights from theory on assemblages. Assemblage theory, developed by Manuel DeLanda following Deleuze and Guattari, is a theoretical framework in which instability and change are characteristic features (DeLanda, 2006). This perspective has recently gained ground in geography, probably because it allows for the

conceptualization of the entanglements of material, social and ideational elements (McFarlane and Anderson, 2011). Geographers working on energy and natural resources often use the term 'assemblage' casually, as Bridge and co-authors have done when stating that 'landscape describes the assemblage of natural and cultural features across a broad space and the history of their production and interaction' (2013: 5). Watts (2013) draws our attention to an aspect of what he calls the oil and gas assemblage: a global production network with particular properties, actors, networks, governance structures, institutions and organizations, but also a complex regime of accumulation and a mode of regulation, held together by the massive global oil infrastructure.

In a more specific theoretical sense, 'assemblage' is employed to describe constellations of social and material, expressive and physical components (Allen, 2011; McFarlane and Anderson, 2011; Ogden et al., 2013; Tsing, 2005). To Sassen and Ong (2014: 19), the 'notion of assemblage is something that helps ... to understand transformations and perhaps even historical turning points' and is a perspective that allows us to actively destabilize powerful social categories. Assemblage thinking has together with actor-network theory been in the forefront of a revalorization of the material, or the co-constitution between humans and non-humans (Müller, 2015; Martinez, 2007). But even though the material realm is often associated with structure and inertia, the time-space of assemblages is imagined as inherently unstable and infused with movement and change (Marcus and Saka, 2006). As a contribution to geographical thought, assemblage theory can be useful for integrating materiality, power and scale into one single analytical framework.

Assemblages can be understood as entities without essence. They involve relations between both human and non-human components, and relational work is necessary to keep these components together. The component parts are harbouring unexercised capacities that might produce very different properties if the entities were to enter into relations with other entities. DeLanda (2006: 10–11) refers to these relations as 'relations of exteriority'. He argues that we must not confuse the properties of a particular entity with the capacities of its component parts to form relations with other entities. Instead of seeing social entities as totalities (organic wholes bound together by internal relations), assemblage theory stresses how the interactions between seemingly separate elements produce unstable and contingent entities, revealing the empirical stability of carbonscapes as temporary, contingent achievements, always vulnerable to reconfigurations. Anderson and co-authors (2012) argue that this notion of relations of exteriority allows us to actualize ongoing processes of composition of different component parts, rethink social formations as complex wholes composed through diversity; and attend to the expressive powers of entities (Bennett, 2005; Gidwani, 2008; Latour, 2005; Ong, 2007). Thus, the assemblage's only unity is that of co-functioning: it is a symbiosis, a 'sympathy' (Deleuze and Parnet, 2007 [1977]: 52). Rather than conceptualizing assemblages as seamless wholes, 'relations of exteriority' implies certain autonomy for the elements they relate (DeLanda, 2006: 10–11).

DeLanda characterizes socio-material assemblages along three dimensions. First, he distinguishes between processes that stabilize the emergent identity of assemblages (by sharpening their borders, or homogenizing their composition) from those that tend to destabilize this identity and hence open the assemblage to change. These are processes of *territorialization* and *deterritorialization*, respectively (DeLanda, 2006; Deleuze and Guattari, 1988). Second, the component parts are recognized by their *emergent capacities*, properties that are contingent by their interaction with other component parts. Finally, by employing DeLanda's notion of the *assemblage converter* we can highlight the

catalytic impact of well-placed component parts in either transforming assemblages or ensuring that relations and parts remain stable (Wanvik, 2014). All three dimensions underscore the pivotal changeability and constant emergence of assemblages, rather than their stability and permanence.

Employing the vocabulary of assemblage theory allows us to better conceptualize the change and instability of carbonscapes. Instead of understanding the interweaving material, social and political structures or socio-technical regimes of 'fossil capitalism' (Huber, 2013) as stable totalities, this vocabulary enables us to theorize the interlinkages between stability and change: Carbonscapes have, since the industrial revolution, been subject to powerful *territorialization* processes that have embedded fossil-based infrastructures, both materially and socially. Since the Second World War, the suburbanization of many cities in the Global North has put in place sprawling urban form, in a material sense. Yet this has also bound conceptions of freedom and wealth together with high energy consumption, the private car, and the larger political-institutional and corporate structures of global oil markets. This *carbonscape assemblage* is strongly territorialized across a range of social and material processes and artefacts.

At the same time, the carbonscape assemblage is made inherently unstable through its relations of exteriority. It has no core, no essence and no fixed identity holding it together. The various elements through which it is composed – the political-institutional structures, the global oil markets, the material infrastructures and the socio-cultural discourses of freedom – are themselves integrated with other assemblages which subject them to specific pressures. For example, there are clear indications that young people are less likely to drive cars ('peak car') and researchers tie this to changing lifestyles and attitudes, new labour opportunities and processes of re-urbanization (Newman and Jeff, 2011; Goodwin and Van Dender, 2013). In other words, the carbonscape assemblage is being *deterritorialized* through its relations of exteriority with the labour market, which in turn is changed by deindustrialization and the shift towards services (among other things). It is likely that decreased car use among youth will gradually change socio-cultural discourses that tie the personal automobile to freedom. In turn, key elements that combine to form the unity of carbonscapes are in motion, which could potentially have deterritorializing ripple effects across the larger assemblage.

From this perspective, transformation is not dependent upon some future overthrow of the 'system as a whole'. Change always occurs in particular assemblages by way of reconfiguration, adaptation and conversion. Dramatic changes in one assemblage can destabilize other assemblages to which it is attached. Assemblages can have *emergent capacities* for change that are difficult to see because change is contingent upon interaction with other component parts. For example, the 2011 Fukushima nuclear accident in Japan led to the decommissioning of German nuclear reactors and a significant policy push to strengthen the *Energiewende* towards renewable energy. This cannot be understood without attention to the emergent capacities in the German policy arena, such as the long-standing popular opposition towards nuclear energy, the long-term strength of the Green Party and emerging public support for sustainable energy production and consumption. In this instance, we can think of the nuclear accident as an *assemblage converter* that impacted particular well-placed components in effecting transformations across several interlinked assemblages. Thus, although a particular social formation appears strong, it is always dependent upon and embedded within other structures and processes that have greater capacities for change.

Our purpose here is not to argue for a complete adoption of DeLanda's assemblage theory

by energy geography (that would go against the very intention of assemblage theory). However, moving away from theoretically constructing near-total coherence around the elements of 'petroculture' (Marriott and Minio-Paluello, 2012), 'fossil capitalism' (Huber, 2013), 'carbon democracy' (Mitchell, 2011) or what we have here called carbonscapes helps us theorize and visualize change processes and potentials. Assemblage theory can provide us with an effective social ontology and a vocabulary for this purpose. Drawing on this theoretical perspective, we can summarily outline our view on carbonscapes:

- Carbonscapes are material landscape expressions of material and social processes that cross-cut spatial scales and localities.
- Carbonscapes are not coherent and integrated unitary systems, but rather *assemblages* combining material and social component parts in stable and unstable ways. These assemblages are strongly territorialized in some places and spatial scales and less so in others.
- Carbonscape assemblages have *emergent capacities* for change. These emergent capacities can be difficult to identify, but the integration of component parts in other assemblages (such as labour markets, technology and infrastructure, geopolitics) means that dramatic change can be affected from the border of an assemblage.
- Component parts of carbonscape assemblages can serve as *assemblage converters* when they happen to be well placed to create ripple effects. Change is never total, as totalities do not, empirically speaking, exist.
- In addition to episodes of dramatic change, carbonscapes undergo gradual processes of *deterritorialization* when the forces holding them together are weakened, diverted or undermined. Physical manifestations may be abandoned, but are more likely to be converted to other uses.

IV Assembling and disassembling carbonscapes

Assemblage theory is useful as a complement to, or an organizing schematic for, geographical insights rather than as a replacement. We find it particularly useful to furnish the assemblage framework with geographical notions of materiality, power and scale; in fact, assemblage theory needs such conceptual furnishing in order to supply the appropriate analytical tools. Assemblage theory is arguably conducive to grasping what Jessop and co-authors refer to as the 'inherently polymorphic, multidimensional character of sociospatial relations' (Jessop et al., 2008: 389). Elsewhere we draw on Allen (2003, 2011) and Massey (1995) to show how assemblages must be understood as multidimensional and multi-scalar (Wanvik, 2014; Wanvik and Haarstad, 2015).

For understanding carbonscapes as assemblages, a particularly instructive geographical framing is that of global production networks of oil, or the hydrocarbon value chain. This captures how oil moves across space from the messiness and environmental externalities of extraction sites, through complex pipelines and tankers, mediated by the global financial sphere and national polities, to consumption sites. As Bridge and others have elucidated (Bridge, 2008; Bridge and Le Billon, 2013; Marriott and Minio-Paluello, 2012), through its movement across this chain, oil intervenes and is implicated in various political–economic struggles and landscape-forming processes at many sites. The carbonscapes at these sites are assembled through complex interactions with the globally integrated oil industry, geopolitical negotiation between

states, and multi-spatial infrastructures. Seen as a globally integrated totality, with a close integration of its component parts ensuring stability and coherence, the oil industry's ability to shape landscapes and politics seems omnipotent and ubiquitous.

However, it is not necessary to see the global oil industry as a coherent totality, as much of the literature tends to do. We can instead examine particular carbonscapes as smaller assemblages partially integrated in other assemblages of different scales, in which both stability and change are contingent upon a range of (de)territorializing processes, emergent capacities and the presence of converters. This can be exemplified by examining three different types of carbonscapes: (1) the extractive hot zone, (2) oil distribution infrastructure and (3) urban sites of consumption and practice.

1 The extractive hot zone

At the origin of the global hydrocarbon value chain, the carbonscapes of extractive hot zones are chaotic and disorderly; they are both literally and metaphorically built on sand. These places are anything but stable and permanent. For instance, witness Fort McMurray in Alberta, Canada, and the turmoil of the boom created by the bitumen extraction during the past decades. High crime rates, racism, excessive substance abuse, panhandling and sprawling shantytowns taint the city's recent history (fieldwork in Alberta, Canada, in 2014 and 2015). Explosive growth has put extraordinary pressure on both remote indigenous communities and local authorities.

In these unpredictable circumstances, several territorializing processes have taken place. With their traditionally shared interest in smooth operations of extractive industries, government and industry make every effort to include and integrate indigenous communities in the value chain to enable them to take part in the positive impacts of industrial developments (Brownsey and Rayner, 2009). These efforts materialize through extensive consultation processes (Lawrence and Macklem, 2000), environmental impact assessments (Harvey and Bice, 2014; Morgan, 2012; O'Faircheallaigh, 2010) and impact and benefits agreements (IBA) (Fidler, 2010). Through these processes, government and industry comprise a joint role as assemblage operator, managing the territorializing efforts, maintaining and stabilizing the carbonscapes of extractive hot zones. However, most of these territorializing processes are delegated to industry, from consultations to self-assessments of environmental impact, to comprehensive local content schemes of labour and service deliveries, to bilateral negotiations of benefits to local communities. Hence, the governance regime within extractive hot zones of Alberta is greatly dependent on corporate profits to maintain a certain level of infrastructure and public services (see Wanvik 2015). This makes the governance of extractive hot zones highly vulnerable to deterritorializing processes and external shocks. The recent drop in global oil prices due to geopolitical tensions and competition over regional oil hegemonies has put tens of thousands out of work and sent government revenues through the floor. Assemblage converters in one part of the oil assemblage (oil price, geopolitical conflicts) on the global scale have led to major disruptions throughout the oil production hot zone.

From within, the material consequences of environmental degradation and the limited, non-renewable character of the energy resource threaten the existence of the extractive hot zone (Le Billon and Carter, 2012; Marsden, 2010; Nikiforuk, 2010). Here, by exposing its desert-like features, vast tailing ponds and huge open wounds in the boreal forest landscape to the world through the lenses of local and global media (Szeman, 2012), the resource depletion and imagery around environmental destruction become potential assemblage converters. Likewise, the social implications for tens of

thousands of indigenous communities bent on protecting their traditional land use rights comprise a destabilizing factor for the industrial activities feeding and forming the carbonscapes of extractive hot zones (Hanson, 2012; Hoberg and Phillips, 2011; Huseman and Short, 2012).

These different deterritorializing processes reveal potent emergent capacities of both human and non-human component parts within the carbonscapes of extractive hot zones. The fall in oil prices and subsequent dramatic layoffs and provincial government deficits partly contributed to a revamping of 'old-fashioned political tools', what has been termed a 'seismic shift' in the Canadian political landscape (Barber, 2015), in which the New Democratic Party won elections after 40 years of conservative rule in Alberta. Whether the environmental degradation has had similarly strong implications for emergent capacities is hard to tell, but combined with indigenous struggles for rights and title, we see the emergence of stronger, more elaborate and powerful indigenous rights movements with some remarkable breakthroughs in treaty negotiations across the Canadian Northern Territories.

2 Oil distribution infrastructures

A second way of exemplifying the instability of carbonscapes is to look at the infrastructures through which oil is transported and distributed (connecting the extractive hot zone and the consumption spaces). It is tempting to see the incredible complexity and embeddedness of networks of pipelines, rail lines, trucks and gas stations as a testament to the stability and deep territorialization of carbon society. Yet they are also highly vulnerable, contested and exposed, and thereby unstable. Consider how Putin's territorial ambitions in Eastern Europe and particularly Ukraine have reignited concerns about European gas supplies and the strategic interests of the EU and the US. The conflict exposes the vulnerability of Europe's energy security and dependency on both Russian supply and the Ukrainian territory transit infrastructure. As Marriott and Minio-Paluello (2012) detail in their travel book, the attempt by BP and others to create an 'energy corridor' from the Caspian Sea bypassing Russian territory has been far from easy. As they put it, '"energy corridor" implies a space of calm orderliness, whereas in reality much of the geography covered is scarred by repression and turbulence' (2012: 7).

As many actors have realized, power relations can quickly shift when control is seized of critical infrastructure junctures through which energy and resources flow. Herod (2000) shows this with respect to labour organization in the US and 'lean' production, illustrating how capitalist reorganization and reterritorialization has contradictory effects on power relations. Other examples show how transit infrastructure developments can serve as assemblage converters, forging new alliances and interest coalitions between actors who are usually divided. As Naomi Klein (2014) describes in *This Changes Everything,* the resistance to TransCanada's Keystone XL pipeline has brought together unlikely allies and mobilized enormous protests in Washington, DC, such as the so-called 'Cowboy and Indian Alliance' of ranchers and indigenous peoples along the pipeline route. Klein claims the struggle against the pipeline has revived the American environmental movement. Whether or not this is the case, the Keystone XL project that was once considered an accomplished deal has become highly publicized, contested and protracted.

Petroleum distribution infrastructures tend to be quite permanent and stable. However, there are significant emergent capacities for change in the sense that they often cross disputed and conflict-prone territories, as well as environmentally sensitive areas, and are vulnerable at choke-off points. The economic and geopolitical significance of distribution infrastructures may enhance their permanence, but it also

embroils them in larger assemblages where they are exposed to shocks, e.g. the impact of the 2014 drop in oil prices on investments in oil infrastructure projects.

3 Sites of consumption and practice in urban contexts

Finally, carbonscapes of urban consumption sites can also be understood as being unstable. Cities and their suburban spaces of car-based lifestyles are the paradigmatic image of oil dependence and inertia (Huber, 2013). However, urban forms can also be subject to rapid change; seemingly inert urban forms can be retrofitted, converted and undermined. A range of cities have rapidly introduced initiatives and policies aimed at increasing urban sustainability and liveability over the past few years. For example, since the first major car-sharing scheme was introduced in Zurich in 1987, it has now been introduced in more than 1000 cities worldwide. Similar trends exist for bus rapid transit (BRT) systems, bike sharing, low emission zones and other policy initiatives (Global Commission on the Economy and Climate, 2014). Policies and initiatives in particular cities are parts of larger assemblages composed of transnational policy arenas, cross-scalar governance arrangements, socio-technical regimes and global economic interlinkages. The quick and widespread uptake of initiatives such as BRTs and car sharing illustrate how swiftly trends in urban policy are picked up at a variety of sites (McCann, 2011; Wood, 2015) and how, in turn, particular 'hot' policy ideas can serve as assemblage converters in cities. While these initiatives are not necessarily undermining urban carbonscapes 'as a whole', they can be expected to fragment, 'splinter' (Guy et al., 1997) and deterritorialize the assemblages of car-based urbanities.

Urban infrastructures are built to accommodate particular industries, socio-technical regimes or lifestyles, or as Shove and co-authors (in press) point out, in *response* to changing social practice. Thus, it is not necessarily the lifespan of the infrastructures per se that influences their longevity, but rather the extent to which the industries, socio-technical regimes or lifestyles that *support them* change. In turn, urban structures can be as unstable as the global industrial dynamics and the socio-technical regimes upon which they have been built. For example, in Norway's 'oil city', Stavanger, large concrete bases of oil platforms (concrete deep-water structures, or *condeeps*) were in the 1980s and 1990s constructed in close proximity to the city centre. As some of the largest man-made structures ever built, and visible to the city's residents as they were towed out to the offshore oil and gas fields, they expressed the labour power put into their construction and the position of the city in the global industry. However, with technology acting as a strong assemblage converter, the oil industry is increasingly using subsea installations rather than *condeeps*. In the 2000s, the wharfs at Jåttåvågen where the *condeeps* were built were converted into a modern urban space with sleek office buildings, apartments and stores, designed according to hegemonic ideas of compactness, walkability and public transport connectivity. A large concrete tower from the old days of rig construction has been left, and serves as a symbolic and emotional icon of the bygone era.

This relatively rapid deterritorialization of an oil-industrial complex and the territorialization of a new urban consumption space was the result of several assemblage converters (technological innovation and new industry practices) and emergent capacities (the will to create spaces for modern, 'sustainable' living). Urban spaces are typically resistant to change, but they may have emergent capacities for transformation and are not determined by the longevity of infrastructures or the urban form. There are myriad examples of how components in urban spaces interact with larger assemblages and are operated upon by assemblage converters. These

Table 2. Assemblage analysis of the instabilities of the oil production chain.

Carbonscapes	Territorializing	Deterritorializing	Converter
Extractive hot zones	• Infrastructure • Environmental impact assessments • Impact benefits agreements • Employment • Royalties/taxes	• Environmental impact • Social impacts • Climate discourse • Indigenous rights discourse • Market shifts • Changing global energy matrix (rise of renewables)	• Sudden oil price changes • Local resistance movements • Geopolitical incidents • Environmentally damaging spills
Petroleum distribution infrastructure	• Militarization / Securitization • Regional / bilateral dependence • International agreements	• Shifting global alliances and powers • Geopolitical tensions and insecurity • Changing global energy matrix (rise of RE)	• Local/regional resistance • Environmental spills, media attention • Sudden oil price changes • Geopolitical incidents
Urban spaces of petroleum consumption	• Road networks • Spatial distribution of housing, industry and retail • Public transportation infrastructure • Embedded socio-cultural structures and practices (automobility)	• Climate change discourse • General sustainability concerns • Regeneration of urban cores • Socio-economic shifts	• 'Hot' policy ideas and initiatives • Rezoning • Technological innovation • Transformative leadership • Sudden oil price changes

assemblage converters may be new 'hot ideas' in urban planning discourses (McCann, 2011), new technologies, and many other factors. The point is that they may undermine the territorialization of oil-based carbonscapes in particular urban contexts. Table 2 presents an assemblage analysis of the production chain of oil by elaborating on the examples provided in the preceding section.

V Conclusion

When exploring the social orders and regimes surrounding oil we should pay more attention to the volatile nature of the energy–society relationship. From the bitumen boomtowns of extractive hot zones to the affluent urban spaces of the Global North, the extraction, conversion, transportation and consumption of energy are unstable processes that we use significant resources to contain, control and put into order. Carbonscapes are maintained and contested throughout the global commodity chains of oil. Therefore, we need theoretical and conceptual frameworks that both recognize stability and enable us to appreciate instability and rupture. We hold that some of the most prevalent frameworks in operation are prone to address the inertia and permanence of carbonscapes rather than their instabilities, and in doing so may exaggerate their stability. Political economy frameworks, infrastructure perspectives, biopolitics and socio-technical regimes share an interest in structures that are maintained and ordered by dominant power relationships. In addition, there is a tendency to think in terms of coherent totality, whole systems articulated by the interrelation of infrastructures, institutions and practices. In thinking of carbonscapes as systems with closely intertwined and co-dependent parts, actual changes may be overlooked or simply dismissed as minor systemic adjustments.

There are certainly efforts to theorize change, e.g. in the sociotechnical transitions literature. Yet it remains within a systemic orientation that prioritizes broad and long-term changes rather than specific ruptures and instabilities.

We have argued that assemblage theory is quite helpful in disaggregating processes of carbonscape stability and instability. Our intention has not been to argue for assemblage theory per se but rather to take advantage of certain opportunities it offers. What is particularly liberating about the assemblage perspective is its insistence on understanding socio-material entities as lacking a coherent core, or strong internal relations holding them together. So instead of talking about techno-institutional complexes, regimes, or a coherent systemic 'fossil capitalism' held together by a co-articulation of institutions, infrastructures and practices (Unruh, 2000; Huber, 2013; Urry, 2013), we can talk about a looser association of different social and material elements drawn together and pulled apart by a range of different forces.

This is liberating because it frees us from the assumption that changes need to impact the fundamentals of larger socio-technical regimes to be significant. Instead, carbonscapes are always subject to both territorializing and deterritorializing processes, simultaneously strengthening and weakening the ability of carbon interests to order social practices. This enables us to recognize, for example, that while *automobility* has been territorialized in urban and suburban spaces through highway construction, shopping malls and sociocultural discourses, it has also, at least during the past decade or so, been deterritorialized by new initiatives of urban regeneration, new and less car-centric cultural values, and widespread recognition of the importance of urban planning for sustainable and liveable cities. Whether or not this challenges the entire 'system of automobility' (Urry, 2004) is hard to say, but these changes are still significant and should inform empirical and theoretical analyses. For us, the important point is to illustrate that carbonscapes are fragmented, contested and converted at particular sites. So, counter to Brenner and coauthors (2011), who suggest assemblage thinking blunts critical sensibilities, we find that assemblage thinking is helpful in opening spaces for negotiation and contestation.

Further work remains toward articulating how the tension between stability and instability of carbonscapes is worked out across scales, territories, networks and places. Ongoing work in geography debates how assemblage theory and spatial concepts can interact fruitfully (McFarlane and Anderson, 2011). A key theoretical challenge for understanding carbonscapes is to elaborate how stabilities and instabilities are worked out in different contexts and how various territorializing and deterritorializing processes play out differently locally, globally and at every scale in between (Haarstad, 2014a; Wanvik, 2014).

Finally, we end by returning to our introductory comment, suggesting that there is a normative rationale for shifting our attention towards instabilities and change. We are not necessarily suggesting that all our exemplified changes are 'good' in a normative sense. But destabilizing the permanence of carbonscapes may be productive in its own right. As noted in the introduction, the emphasis on structural constraints runs the risk of reproducing the oil industry's carefully scripted narrative of its own inevitability. Geographers are particularly well placed to go beyond the generalized and large-scale panorama of energy systems in which change is primarily gradual and *longue durée*. Whether we use assemblage theory or some other framework conducive to understanding instability, it is critical that the specific lens that spatiality affords us is also used to identify the cracks in the wall and the leverage points for transformation.

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Author biographies

Håvard Haarstad is research professor at the Department of Geography, University of Bergen. He is currently working on climate and energy transformations in urban spaces. As Fellow of the Bergen Research Foundation he leads a group examining cities and the politics of sustainability in Europe. His earlier work has focused on resource extraction and civil society politics, particularly in Latin America.

Tarje I. Wanvik is a PhD candidate at the Department of Geography, University of Bergen, with research interests in contested energy spaces, climate and energy transformation, governance innovations and corporate social responsibility. He has recently published in Norwegian Journal of Geography and Extractive Industries and society. His professional background is from humanitarian aid, fundraising, advocacy campaigning, public relations, communications, corporate branding and media.

Haarstad and Wanvik coordinate the Spaces of Climate and Energy Lab (SpaceLab) at the Department of Geography, University of Bergen.

PAPER #3

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Governance transformed into Corporate Social Responsibility (CSR): New governance innovations in the Canadian oil sands

Tarje I. Wanvik

Department of Geography, University of Bergen, P.O. Box 7802, N-5020 Bergen, Norway

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ABSTRACT

In the contested space of energy production in Canada, tension and a series of disputes over land and rights have arisen between the state, industry and local Aboriginal communities. Canadian governments have long exploited the bountiful natural resources of the land, while at the same time attempting to reconcile a difficult relationship with its Aboriginal communities. This case study reveals how the government has yielded responsibility to industry to resolve the many governance challenges of Canada's extractive hot zone. Through substantial delegation of governance duties to industry, the Canadian Government has placed large parts of its regulatory toolbox in the hands of multinational Corporate Social Responsibility (CSR) departments, and hence turned social and environmental planning and programming into corporate stakeholder management. This article sets out to explain these dramatic changes in governance power play and practice by examining the case of the extractive hot zone in Alberta, according to three distinct but interlinked trajectories in governance and CSR scholarship, namely the change from "government" to "governance", the emergence of a claimed post-political condition and the evolution of CSR practices towards stakeholder management.

1. Introduction: Governance transformed into Corporate Social Responsibility (CSR)

In both the management literature and other areas, the growing body of research into Corporate Social Responsibility (CSR) indicates a field that has become rather polarized between proponents and opponents of a concept that over the past 20 years has been transformed from an irrelevant and often frowned-upon idea to one of the most orthodox and widely accepted concepts in the business world (Lee, 2008). As always, orthodoxy should be treated with caution, and by exploring case studies researchers can elaborate on and scrutinize the role of CSR and its implications.

For decades, encounters between global enterprises and local communities have been represented in geographical terms, and this article is no exception. The case study here of the Norwegian oil company Statoil and its ventures in the extractive hot zone of Canada provides insights into the workings of social, material and historical realities, challenging the image of CSR and its wider implications for societal governance.

The global energy market in general and the extractive hot zones more specifically are fertile ground for governance innovations; hence, they are excellent sites for studying emerging governance practices. The activities of the extractive industry have had a great impact on the social, cultural and environmental realities in these zones (Gamu et al., 2015; LeClerc and Keeling, 2015; Veltmeyer and Bowles, 2014; Virah-Sawmy, 2015). Although there have been immense benefits for Canadian society, the burden shouldered by local ecosystems and Aboriginal communities is substantial, which adds up to a prolonged historical conflict between the Crown and its Aboriginal citizens over rights and entitlements (Cairns, 2000; Veltmeyer and Bowles, 2014). The reciprocal arrangement between industry and government on the one hand and local communities on the other has been observed to be skewed, with insufficient contribution to local development and fulfilment of Aboriginal rights and entitlements (Dembicki, 2012; Dow, 2012; Foster, 2008; Kelly et al., 2010).

Historically, the governance structure of Canada's extractive hot zones has been dominated by two groups of actors, namely governments at all levels and industry (Hoberg and Phillips, 2011). Huge efforts have been invested by these two sectors in developing a previously uneconomic energy commodity (bitumen) into a highly profitable enterprise, resulting in a thriving industrial venture (Sherval, 2015). However, this has not come without cost; bitumen extraction has reinforced past grievances among local Aboriginal communities, which have once again being deprived of their hard-earned access to traditional territories (Black et al., 2014; Huseman and Short, 2012; Jamasmie, 2014).

E-mail address: tarje.wanvik@uib.no (T.I. Wanvik).

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To cope with these potentially destabilizing conditions, the Crown has facilitated the emergence of flexible governance innovations, comprised of three tangible measures, namely consultation, environmental impact assessments (EIAs) and impact and benefit agreements (IBAs) (Griffin, 2012; Harvey and Bice, 2014; Lemos and Agrawal, 2006; Reich, 2008; Solomon et al., 2008). These measures are based on the following objectives. All concerned parties (stakeholders) are to be (1) *consulted* and should make valuable contributions to governance processes; (2) *invited to participate in assessments* of planned interventions; and (3) *expected to reach agreements* based on certain minimum levels of consensus, so-called positive-sum games or win–win solutions (Jacobsson and Garsten, 2012). Only through governance structures based on pragmatic "what works" criteria—the discourse goes—can proper management of the extractive hot zones be exercised (Jones, 2008).

Accordingly, industry has been delegated extensive responsibilities for the use of governance instruments. Consequently, by encouraging companies to comply with international CSR standards, *and* by facilitating "beyond compliance activities", the Alberta government has put private interests in the driver's seat of the governance framework of the extractive hot zone.

To understand how these governance innovations emerged, and what their impact and consequences have been, we must examine recent developments in three different but related strands of thought in governance and CSR scholarship. The first relates to the conventional shift from government to governance, a development characterized by a move from hierarchical, representational government by institutions under majority rule, to more networked, egalitarian stakeholder relations based on alleged consensus (see for example Bingham et al., 2005; Braithwaite and Levi, 2003; Jessop, 1997; Jones, 1998; Rhodes, 1997, 2007). The second development relates to the first, but goes further by identifying a radically interpreted, particular post-political condition, namely the emergence of a managerial, elitist space emptied of politics where decisions are based on pragmatic "what works" criteria (see for example Agamben et al., 2009; Brown, 2005; Crouch, 2000; Mouffe, 1999, 2005; Swyngedouw, 2005, 2011; Žižek, 1999). The third feature is the incremental evolution of CSR towards stakeholder management. This change in corporate practices can be viewed as a response to changing governing preferences, together with an increased maturity in CSR implementation, primarily among multinational companies, where traditional philanthropic, standardized and image-based CSR has been replaced by an allegedly collaborative, performance-driven and integrated practice (Brammer et al., 2012; Dentchev et al., 2015; Porter and Kramer, 2006; Scherer et al., 2014; Solomon et al., 2008; Visser, 2013). This is in line with what scholars have identified as a more "inclusive business model" (Virah-Sawmy, 2015).

By following Statoil's[1] journey into the vast prairies of Alberta, I show how companies have become an integral part of the new governance structure of Canada through their pragmatic quest for a social licence to operate. Multinational companies have encountered a highly politicized space in the extractive hot zone, and from a mix of formal consultations, corporate self-assessments and bilateral negotiations, we see the emergence of hybrid governance structures, and more specifically the emergence of *governance as corporate stakeholder management*, in which industry plays the leading role.

This article is based on data collection and extensive fieldwork conducted from 2014 to 2015 in the extractive hot zone of Alberta, in a very challenging research environment where information is difficult to access, and vital parts of the governance practice are "out of reach" to outsiders (Jenkins et al., 2015). This particular case evolved from my gaining access to some vital key informants in an operating company (Statoil), a multi-stakeholder institution (CEMA) and some key local communities in the study area of interest: from Fort McKay in the north to Cold Lake in the east, and from Métis Crossing in the west to Calgary in the south. Interviews were conducted with Aboriginal community leaders, elders and representatives, government officials, consultants, lawyers and CSR officers and managers.[2] Fortunately, two Aboriginal communities provided access to important traditional land use studies. Additionally, countless pages of EIAs, manuals, guiding principles, strategies and Supreme Court decisions on Aboriginal rights and title were analysed. This illustrative case of Statoil in Alberta could have been conducted with other companies and stakeholders elsewhere in similar contexts, and serves here to shed light on the pragmatic adaptive processes of companies responding to changing governance preferences in the relationship between the extractive industry and society.

2. The extractive hot zone of Conklin, Alberta

The oil sands region of Canada is primarily situated in the north-eastern part of the province of Alberta, until recently relatively sparsely populated by various Aboriginal groups of First Nations or Métis[3] origin. As in many extraction zones, the oil sands region encompasses traditional lands of Aboriginal people. Today, in the midst of the Athabasca bitumen area is Conklin, the closest community to where Statoil operates. Conklin is a small community of Métis people in the municipality of Wood Buffalo, Alberta (Fig. 1).

Despite its isolation, Conklin is a community that is at the centre of the oil sands development. Here, the Métis people have practised trapping, hunting, fishing and harvesting for over a hundred years, living off the land. Steam-assisted gravity drainage operations combined with ancillary high-voltage transmission lines and bitumen pipelines have greatly impacted the area. According to the community, the traditional harvesting territory of the Conklin Métis covers about 10,000 km^2, stretching from Wiau and Grist Lakes in the south to Algar and Gordon Lakes in the north (Fig. 2) (Golder Associates, 2011). The traditional way of life based on hunting, fishing, trapping and gathering is quickly becoming impossible for the Métis of Conklin (Conklin Métis Local #193, 2012).

Today, community members find it increasingly difficult to access traditional lands. Old trails have been destroyed or upgraded into roads for trucking, numerous new seismic cut lines have been created throughout formerly intact lands and long-standing routes have been restricted or blocked by oil developers (Conklin Métis Local #193, 2012:36). Development has caused a rapid decline in the numbers of animals, berries and plants, as well as a decrease in air and water quality (ibid:72). In addition, the

[1] Statoil Canada Ltd. (Statoil) developed and operates the Kai Kos Dehseh (KKD) leases, which contain more than two billion barrels of estimated recoverable resources. Statoil employs more than 800 people, with its headquarters in Calgary, Alberta. Established by the Norwegian government in 1972, Statoil has grown to become one of Europe's leading oil and gas companies. The company operates 60% of all Norwegian oil and gas production (in (Vaaland and Heide, 2008)), and is Norway's largest single company with a net operating income of NOK 110 billion in 2014 (in (Statoil, 2014)).

[2] Some interviewees remain anonymous, according to their wishes and in general consideration of the vulnerability of certain contributors to this study.

[3] The Métis are recognized in the Constitution Act of 1982 as one of Canada's three Aboriginal peoples. The term Métis did not have a precise definition until the latter half of the 19th century, when it clearly described people of mixed French and native ancestry.

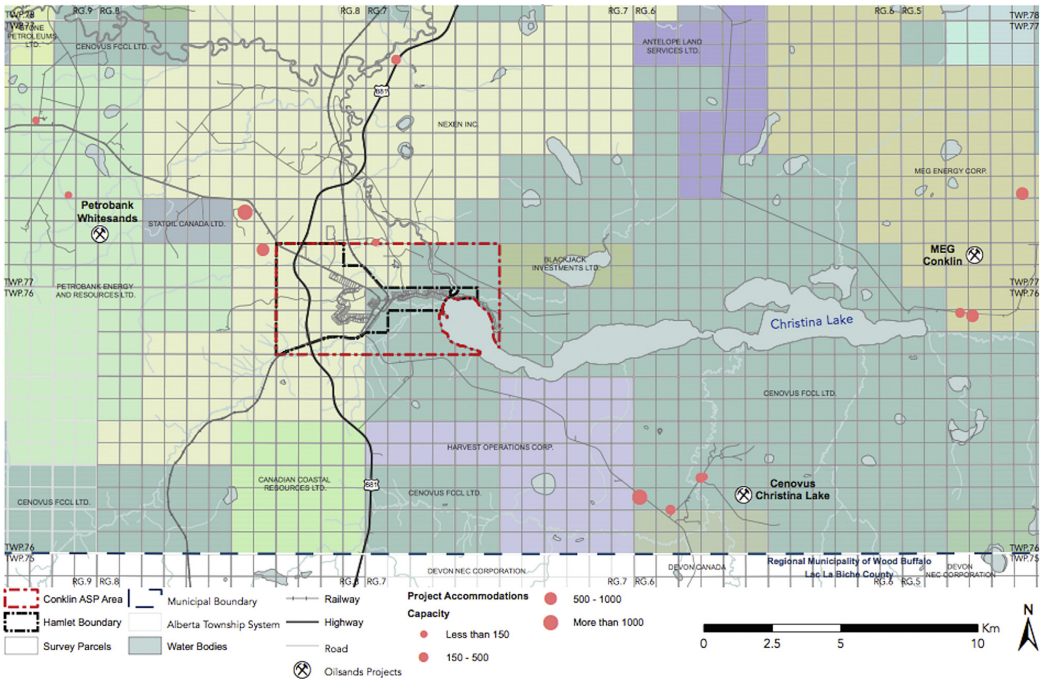

Fig. 1. Conklin Métis community surrounded by industrial developments ("Bylaw No. 13/024, Regional Municipality of Wood Buffalo," 2013).

social and cultural challenges experienced within the small community are devastating, with substance abuse, alcoholism, high crime rates and poor living conditions taking a heavy toll of its inhabitants (interview with head of Conklin Resource Development Advisory Committee, 2015).

The history of the Conklin Métis is a microcosm of the complex history of the Métis (and other Aboriginal peoples) in Canada, which has been characterized throughout modern Canadian history by recurring cycles of settlement, displacement, dispossession and dispersion of Métis people from traditional homelands and movements to new lands (Conklin Métis Local #193, 2012). The province of Alberta and the regional municipality of Wood Buffalo struggle to govern this complex landscape of industrial developments and traditional ways of life.

3. Governance theories and corporate responses

In the governance of complex societies, it appears to be a truism that there are a multitude of concerned parties. Theories of complex systems and networks have recently formed the basis of applied governance approaches to the participation of concerned parties or stakeholders (Dentchev et al., 2015; Dicken et al., 2001; Harvey and Bice, 2014; Jacobsson and Garsten, 2012; Jones, 1998; Reich, 2008; Sunley, 2008). The parties in such forms of governance participate (or are allowed to participate) in these decision-making relational networks because of their "stakes" in the issues that these forms of governance are intended to address (Swyngedouw, 2005: 1995). In the following sections, we revisit three basic notions behind the emergence of what I term *governance as corporate stakeholder management*. To understand these changing features of governance, we must examine three different but interrelated developments in the governance and management literature, combined with subsequent changes among CSR practitioners.

3.1. From government to governance

The concept of "governance" is used in many subdisciplines of the social sciences. Common elements emphasized are co-operation to enhance legitimacy, the effectiveness of governing societies, new processes and public–private arrangements (Kooiman, 2003). Traditionally, governing is what governments do—they control the allocation of resources between social actors, and provide a set of rules and operate a set of institutions to do so. Thus, governing involves the establishment of a basic set of relationships between governments and their citizens, which differ from highly structured and state-controlled hierarchical arrangements to those egalitarian or "plurilateral" society-driven ones that are monitored only loosely and informally, if at all (Howlett et al., 2009). In its broadest sense, "governance" is a term used to describe the mode of increased government co-ordination exercised by public *and* private actors in their efforts to solve problems of collective action inherent in government and governing (De Bruijn and Ernst, 1995; Klijn and Koppenjan, 2000; Kooiman, 2000; Rhodes, 1996). The driving force behind this development is said to be the increased recognition of societal complexity, and a growing awareness that governments are not the only crucial actor to address major societal challenges (Kooiman and Van Vliet, 2000).

Governance of the extractive hot zone of Alberta can be said to be a process by which an ever-wider range of actors is drawn into governing processes thought to be characterized not by rules, regulations and the exercise of hierarchical authority, but by informal networks claimed to be egalitarian that focus upon partnerships and networks and the blurring of the boundaries between public and private sectors.

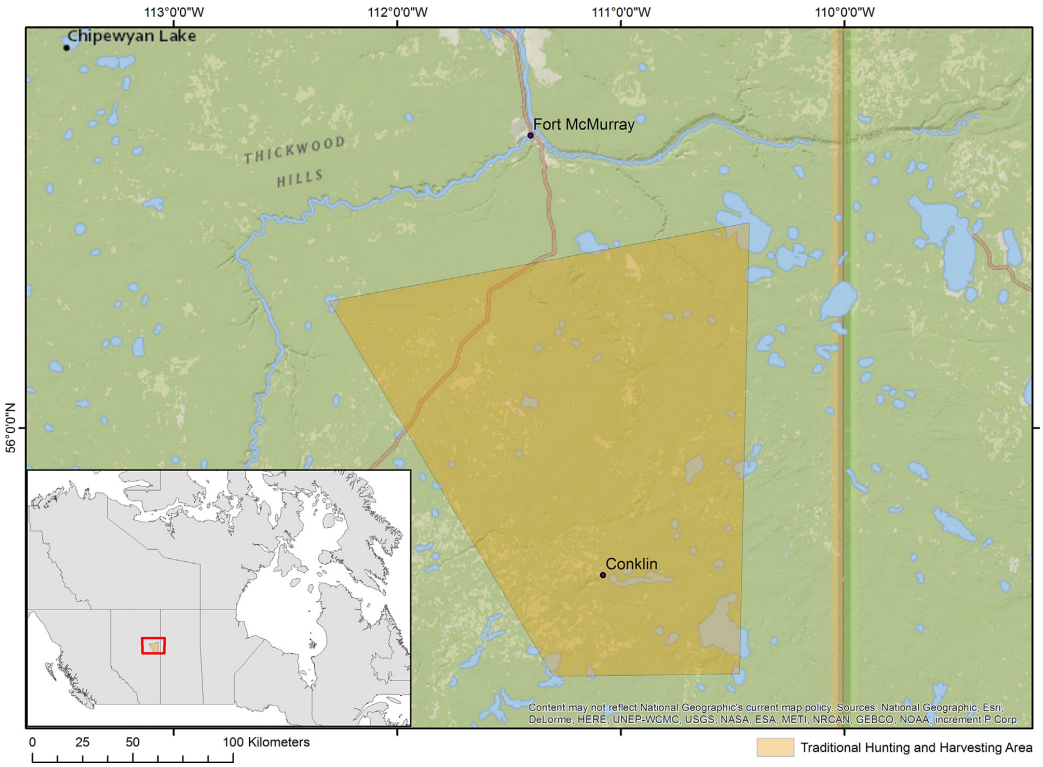

Fig. 2. Conklin Métis Local #193 harvesting area (based on Golder Associates, 2011).

3.2. The post-political condition

Although governance has gained considerable attention and endorsement, an influential group of scholars has strongly criticized its alleged crippling effects on democracy and participation (Mouffe, 2005; Rhodes, 2007; Swyngedouw, 2005, 2010). As Lemke (2007) points out, for all the positive aspects associated with the shift towards governance, there are also questions about its ability to improve democratic processes, not least about how it can potentially marginalize conflicts between groups or underplay contradictions between political objectives and actions—a condition referred to as "post-political" (Swyngedouw, 2010).

The post-political condition is held to be one where contestation and conflict are supplanted by consensus-based politics (Butler et al., 2000). Central to this view is Mouffe's distinction between the "political" as the space of power, conflict and antagonism within human societies, and "politics", described as "the set of practices and institutions through which an order is created, organizing human coexistence in the context of conflictuality provided by the political" (Mouffe, 2005:9).

Post-political analysis offers potentially useful insights into the framing of recent changes to governance systems, especially what is understood to be within the remit of governance, and who engages with a system and under what terms (Allmendinger and Haughton, 2012). According to Oosterlynck and Swyngedouw (2010), the new forms of governmentality that have arisen over the past decades have formed with the consensus—despite often conflicting agendas and lifestyles—that managerial–technological apparatuses should permit the negotiation of conflicts in such a way as to arrive at mutually beneficial policy formulations. This amounts to colonization of the political by managerial–technological governance that has erased the gap between the political and policies, resulting in depoliticization (Oosterlynck and Swyngedouw, 2010).

3.3. Changing CSR frameworks

These changing spaces of governance correspond with developments within the field of CSR. The basic concept of CSR is that corporations are a vital part of society, and that they have both the power and the responsibility to conduct their affairs in ways that satisfy not only shareholders, but also other constituencies such as employees, customers, the environment and the community at large (Eijsbouts, 2011). Since the 1950s, CSR has increasingly become a buzzword in corporate–community relations. CSR has especially taken hold within extractive industries, first as a tool used by NGOs to police multinational mining or energy companies operating in the Global South (Dupuy, 2014; Harvey, 2014; Virah-Sawmy, 2015). Later, business gained control over its own CSR activities, leading to a proliferation of business-led CSR initiatives, concerning both international CSR standards and CSR reporting (Frynas, 2005; Harvey, 2014).

In the CSR literature, the principle of voluntarism is predominant and requires responsible business activities to be value based (Bowen and Johnson, 1953), discretionary and to extend beyond legal requirements (Carroll and Shabana, 2010; Dentchev et al., 2015; Eijsbouts, 2011; Lee, 2008). Among the many critics of voluntarism, Rajak (2011) states that CSR has evolved from a

movement among campaigners to compel companies to "clean up their act" to a discourse of unity and partnership led by corporations themselves. Describing the historical development from activist-oriented naming and shaming of multinational companies to a more industry-led, self-inflicted social consciousness, Rajak claims that the moral economies of responsibility, generosity and community—and the social bonds of affection and coercion that these create—have become not the weapons of the weak, but the weapons of the powerful (ibid.).

A transformative concept within this critical development has been stakeholder management, a term first coined by Freeman in 1984 (2010). Maintaining "a licence to operate" is perceived to be a constant challenge (Harvey, 2014; Jenkins and Yakovleva, 2006; Virah-Sawmy, 2015), and for the extractive industries, CSR is about balancing the diverse demands of a wide array of stakeholders, with the ever-present need to make a profit (Jenkins, 2004). The stakeholder model of CSR was developed mainly by management scholars who were frustrated by the lack of practicality of the previous theoretical models. A stakeholder refers to any individual or group that maintains a stake in an organization in the way that a shareholder possesses shares. Furthermore, a stakeholder here is defined as any group or individual that "can affect or is affected by the achievement of an organization's objectives" (Freeman, 2010:46). Within the stakeholder framework, the difference between the social and economic goals of a corporation is no longer relevant, because the central issue is the survival and success of the corporation (Harvey, 2014; Lee, 2008; Virah-Sawmy, 2015). Survival of a corporation as such is affected not only by shareholders, but also by various other stakeholders such as employees, governments and customers (Donaldson and Preston, 1995). Jones (1995) correctly predicted that the stakeholder model had great potential to become the central paradigm in the field of CSR.

In summary, I argue that the foundation upon which the governance innovations in the extractive hot zone in Alberta have been constructed is based on three distinct but interwoven developments: (1) the theoretical and empirical evolution of governance as a multi-stakeholder approach that is more than government; (2) the subsequent critical identification of what has been termed a pragmatic, consensus-seeking, post-political condition; and (3) the parallel emergence of CSR as stakeholder management. By adopting these theoretical lenses of analysis in the following case study, I provide a framework to explain how governance innovation is taking place in the extractive hot zone.

4. Governing the extractive hot zone

Historically, the governance structure of Canada's extractive hot zones has been dominated by two groups of stakeholders, that is, governments at all levels and industry (Rummens, 2009). Over the past two decades, tensions have increased between local Aboriginal communities and the Crown because of the proliferation of industrial activities. The authorities have explored a number of avenues to facilitate a smooth transition for peripheral, heavy-impacted, rural communities, but without much success. In the early 1990s, several of the smaller hamlets in the extractive hot zone of Northern Alberta merged with the urban growth centre of Fort McMurray to establish the regional municipality of Wood Buffalo. The distribution of the increased tax revenues resulting from the merger has been controversial, and several of my informants reported a formula that was skewed between urban and rural areas: "The smaller hamlets bearing the heaviest burdens [industrial impact] suffer from strong competition for limited public funds and attention" (interview with consultant, 2015). With three rural representatives on the council, compared to seven from urban areas, it is evident that the opportunities are slim for remote areas; they are left to their own devices, to fend for themselves: "There is a great difference between the communities with representation and those of us who have none. Without representation you get nothing" (interview with Fort McKay Métis community leader, 2015).

In and around Conklin, where Statoil has its activities, the level of criticism is rising, pointing to the absence of municipal support and presence:

> "The regional municipality does not do anything. We have to fight for every single project; last time it was the multiplex (community activity centre). We need a multiplex to get our kids off the drugs and quit drifting around looking for trouble, but we have had to fight the municipality at every juncture. Not even the newly installed water facility is for the community. They sell the water to industry" (interview with head of Conklin Resource Development Advisory Committee, 2015).

This critical situation represents a rich opportunity for alternative actors to fill the void, and for alternative governance innovations to emerge.

4.1. Governance innovations to solve tensions

To create a more stable relationship between the component parts of the extractive hot zone, the government has developed flexible governance innovations, with three recognizable features, namely consultation, EIAs and IBAs. In the following sections, I elaborate on the genealogy of these different governance instruments, and how they can be said to constitute governance innovation reformulated as corporate stakeholder management. Each feature has its own academic and juridical literature, but the scope of this paper does not allow me to engage with all of them. Hence, I offer only a brief, schematic outline of their characteristics, before elaborating on their empirical manifestations.

4.2. The duty to consult

Alberta extractive hot zones geographically overlap Aboriginal traditional lands and treaty areas. The duty to consult is triggered by an apparent violation of an existing Aboriginal or treaty right recognized and affirmed by the Constitution Act (1982), or in cases where Aboriginal communities assert rights that have yet to be formally recognized by a court of law or treaty (Jacobsson and Garsten, 2012). This common law duty stems from the Crown's fiduciary obligation towards Aboriginal peoples and Section 35 of the Constitution Act (1982), which are interrelated (Delgamuukw, 1997; Eyford, 2015; Gogal et al., 2005; Lawrence and Macklem, 2000). A number of court cases have debated and elaborated the infringements of Aboriginal rights in relation to natural resource extraction, each contributing to the increasingly complex and multifaceted regulatory environment of the Canadian extractive hot zone (Gogal et al., 2005).

In most cases, this duty to consult is delegated to industry proponents. Crown policy often requires a private company to consult with adversely affected First Nations or other Aboriginal communities (Delgamuukw, 1997; Haida, 2004; Sparrow, 1990; Tsilhqot'in, 2014). This delegation is pragmatically justified because the proponent has better insight into project details, and is also best positioned to compensate for infringements (Alberta Government, 2014; Fidler, 2010; Gogal et al., 2005; Lawrence and Macklem, 2000). This practice of delegation is confirmed and backed by the Supreme Court of Canada (Gogal et al., 2005), and is also supported by local stakeholders: "Most communities would rather negotiate with companies than with the government or municipality" (interview with consultant, 2015). Although this is partly because of the historically bad

relationship between indigenous communities and the Crown, it is also because the municipality has no resources to spare.

However, the duty to consult does not apply to Conklin and many other Métis hamlets because of the undecided consultative status of Métis communities in Alberta.[4] Alberta recognizes a duty to consult with some Métis communities when Crown land management and resource development decisions may adversely impact their traditional uses. "Currently, the province does not have a Métis consultation policy but has put in place an internal process to guide consultation with Métis communities on a case-by-case basis where there is a credible assertion of Métis Aboriginal rights" (email correspondence with community associated lawyer, 2014).

In the case of Conklin, the fact that consultation is delegated to industry is important: "Our stakeholder focus is on communities within 30 km of the facility" (Statoil Canada, 2007). Industry is less concerned about formalities regarding Aboriginal status, and more worried about pragmatics: who are the stakeholders that can influence, or be influenced by, our performance? "We firmly believe that community consultation is a starting point for building the long-term sustainable relationships we need for successful oil sands development" (Statoil Canada, 2013).

4.3. EIAs

The second governance feature in the Alberta extractive hot zone is EIAs. In practice, an EIA has a much broader scope than the duty to consult, but it contains some similar characteristics related to governance. As a key component of environmental management over the past 40 years, EIAs have coincided with the increasing recognition of the nature, scale and implications of environmental change brought about by human actions (Haida, 2004). As for the duty to consult, EIAs are delegated to companies (Morgan, 2012), but are carried out in close collaboration with government agencies.

Environmental disruptions are evident in the extractive hot zones, and local stakeholders report the material consequences of the industrial operations within the zone (Chipewyan Prairie Dené First Nation, 2007; Conklin Métis Local #193, 2012).[5] The material consequences are significant for Aboriginal communities, which are surrounded by logging, exploration, development and production activities by both forestry and hydrocarbon industries: "It's no use, it will never get better or get back to the way it was before. The fish in the river are gone, the game has been driven out of these areas, and the few catches we get are sometimes rotten inside" (interview with elder, Fort McKay Métis Community, 2015).

These changes have affected subsistence practices and greatly impacted the freedom of Aboriginal community members to move about the land for traditional land use purposes. The community is no longer free to hunt, trap, fish or gather berries and plants as it was previously (Chipewyan Prairie Dené First Nation, 2007; Conklin Métis Local #193, 2012; Connacher Inc., 2010). The lawyer working closely with the Conklin community confirmed this:

> "Although there is no doubt that fewer Conklin residents sustain themselves by hunting and trapping than did so even as recently as 40 years ago, these traditional pursuits have not been reduced to the level of hobbies. Most residents still take part in hunting and fishing for food as well as gathering plants, herbs and berries for both food and medicinal purposes. It is actually the gathering activities that are most sensitive to the environmental effects of development" (email correspondence with community associated lawyer, 2014;).

This mixed indigenous economy is in line with similar findings by other scholars: "For Aboriginal communities, the mixed economy is dynamic and intrinsically bound to the environment, making the long-term impacts of industrial development especially critical" (LeClerc and Keeling, 2015:17).

The Statoil EIA for its Conklin project states:

> "To ensure openness and transparency in the community, the company has undertaken a regional EIA that fully discloses the commercial development in the approximately 12 townships[6] of bitumen leases held by the company. This application and EIA discloses the development over the life of the project. The regional EIA regulatory approach was developed through consultation with provincial regulatory agencies" (Statoil Canada, 2007).

A common theme in most scholarly discussions of EIAs is a critique of the rationalist model of governance, pointing to the need to explore and develop models that embrace new thinking about planning and decision-making processes in their wider social, cultural, political and economic contexts (Alberta Government, 2013). This has encouraged the promotion of deliberative and collaborative approaches to planning and decision-making processes, including EIAs themselves, such as bringing stakeholders and communities into the processes, emphasizing the importance of communication as a means of negotiating consensus solutions that capture the values of those participants, and moving the professional technocrats from a controlling role to a facilitating role in the decision-making process (Bartlett and Kurian, 1999; Richardson, 2005; Wilkins, 2003). This view is confirmed by the Statoil EIA: "Several of the EIA programs, such as the wildlife monitoring for caribou, moose and wolf, were tailored to actively engage the local stakeholders and address their specific issues" (Statoil Canada, 2007). EIAs are commonly criticized for being biased in favour of proponents, and lacking peer-reviewed data analysis (Aguilar-Støen and Hirsch, 2015; Davidson and MacKendrick, 2004; Fidler, 2010; O'Faircheallaigh, 2007; Wilkins, 2003). Although Statoil's caribou monitoring project has been one of a rare collection of peer-reviewed EIA programs, it has also been the subject of substantial criticism for being too limited and unscientific (Boutin et al., 2012).

However, an EIA in itself is not constructed to mitigate or mediate environmental or social disturbances of planned industrial operations. For that purpose there has been a proliferation of EIA follow-up initiatives, such as environmental agreements and other negotiated agreements, that are intended to reduce the widespread difficulty of ensuring effective follow-up of EIAs regarding both anticipated environmental impacts and their actual appearance (Elling, 2009; Wilkins, 2003), as well as to ensure monitoring to prepare for the unexpected. I now focus on the most common tool in relation to social impacts in the extractive hot zones, that is, IBAs.

4.4. IBAs

IBAs are privately negotiated agreements, typically between extractive industries and local communities, whereby government is relegated to an external observational role. IBAs are commonly viewed as agreements that establish formal relationships between signatories, mitigate negative development impacts and enhance

[4] Although, in its June 2007 Métis Harvesting Policy, Alberta conceded that Conklin is a rights-bearing community with harvesting rights (lawyer, legal analysis, Appendix to traditional land use studies, Conklin Métis Local #193).

[5] These sources are traditional land use studies kindly provided by Chipewyan Prairie Dené First Nation and Conklin Métis Local #193. The sources contain data collected from elders in the two communities, based on interviews, field trips and storytelling.

[6] A standard geographical unit.

positive development outcomes for Aboriginal communities (O'Faircheallaigh, 2007). The agreements primarily focus on employment and economic benefits, while more recent IBA constructions acknowledge the need for greater flexibility and diversity of community involvement in industrial decisions and the need for social and cultural programs, dispute resolution mechanisms, revenue-sharing provisions and environmental restrictions (Caine and Krogman, 2010; Diges, 2008; Dreyer and Myers, 2005; Gibson, 2008; Sosa and Keenan, 2001).

IBAs are signed between extractive industries and Aboriginal communities in Canada in general, and more specifically in Alberta, to establish formal relationships between them, to reduce the predicted impact of an industrial operation and to secure economic benefits for affected communities (Galbraith et al., 2007; Gibson, 2008; Sosa and Keenan, 2001). IBAs do not fall under the purview of the state and thus fall within a historically uncontested, grey area of legality, often referred to by lawyers as quasi-legal[7] (Sosa and Keenan, 2001).

To industry, these IBAs represent an opportunity to overcome a complicated situation resulting from the difficult relationship between the state and its Aboriginal people:

> "Government and the regulatory government for our industry; it's horrible, and it's got a lot of history to it. You have to appreciate that we [industry] are in the middle of this relationship, a nation-to-nation relationship. When they [Aboriginal people] are not being recognized, all of that comes into the mix when industry tries to operate. And we have our own interests in doing things right" (interview with CSR manager, Statoil Canada 2015).

This attitude resonates well with other parts of the industry, which claim that there may well be some very good business reasons for the extractive companies operating in frontier regions to want to pay attention and contribute to social development in their back yard. Companies should tune their operating models to help alleviate poverty, generate self-sustaining economic conditions that will drive the company's costs down over time, and avoid community unrest and criminal behaviour (Harvey, 2014:8).

Conklin has negotiated a number of long-term agreements with industry: "These agreements have provided communities with direct funding support for physical, social, and human infrastructure, as well as contracting opportunities for company businesses and a process to address environmental issues involving future developments" (email correspondence with community lawyer, 2014). Clearly, IBAs avert the issue with regard to the consultative status of the Métis, making IBAs arguably the most useful of the three governance features for the Métis communities of Conklin and elsewhere. Since 2009, Conklin has taken an aggressive approach to asserting its Aboriginal rights. Thus, the agreements signed by the community are comparable in their terms to those signed by local First Nations people. The agreements do not deal with compensation for the infringement of Aboriginal rights, because that is a matter for which the Crown is completely responsible: "Rather, the money and business opportunities received from industry are intended to help the community cope with and respond to the massive change that oil sands activity is imposing on it" (email correspondence with community associated lawyer, 2014).

This approach is echoed in the statements from the company:

> "We use a lot of resources in social investment, and I feel we have a good understanding of the situation that way. We operate in their back yard, so to speak, and want to be a good neighbour. We try to interact, and compensate those who are affected by our operations in an adequate manner. There were a lot of social problems in Conklin, and many were thrilled when we arrived" (interview with CSR manager, Statoil Canada, 2014).

On signing an IBA, an Aboriginal group accepts restrictions to the exercise of their traditional rights and Aboriginal title. They provide industry with access to their lands, and give their support to the resource development project. In return, they accept a "package of measures" that include economic benefits and the minimization of negative impacts on the environment and people. Additionally, most IBAs contain provisions to ensure consent and co-operation from the Aboriginal community, and confidentiality and non-compliance clauses (Caine and Krogman, 2010; Diges, 2008; Gogal et al., 2005; Keeping, 1999). Prno (2007) argues that Aboriginal peoples find these agreements appealing because they lend legitimacy to Aboriginal claims to land and rights (Caine and Krogman, 2010). Most communities recognize that the regulatory process is biased in favour of development, and communities seek economic and contracting benefits because "the choices they are faced with are either having development proceed and receiving some benefit from it, or having development proceed and receiving no benefit at all from it" (email correspondence with community associated lawyer, 2014).

Because of the grey area of legality concerning IBAs, there is some ambiguity regarding the claimed confidentiality surrounding these agreements. Some claim that "these agreements are generally kept confidential at the request of industry, since companies view them as business contracts, which under our legislation are entitled to confidentiality" (email correspondence with community associated lawyer, 2014), while industry claims that "Statoil will continue to honour our agreements with communities, and out of respect, that would include their confidentiality" (email correspondence with CSR manager, Statoil Canada, 2015). According to the Government of Alberta's Aboriginal Consultation Office (ACO), social agreements (IBAs) have nothing to do with their duty to consult. They are confidential in nature and there is nothing that compels companies or communities to divulge this information (email correspondence with head of ACO, 2015). However, Statoil noted: "Our agreements cover areas such as social investment, consultation, economic and workforce development. Our commitments are fairly generic and describe how we wish to work with our communities" (email correspondence with CSR manager, Statoil Canada, 2015). "We really want to link it to business risk. It is much more than being perceived as a good citizen of the world, there is a business rationale behind it" (interview with CSR advisor, Statoil Norway, 2015). "If we have healthier local communities benefiting from our programs, they are more loyal" (interview with CSR manager, Statoil Canada, 2015). These findings resonate well with similar claims from industry: "Such outreach programs can work wonders for a while with people who have known little previously in the way of modern comforts" (Harvey, 2014:9) and public services.

In summary, the rationale for Aboriginal groups to enter into these agreements includes overcoming marginalization, strengthening regional economic and political sovereignty and increasing control of resources to ensure regional benefit flows returning to communities affected by development. Resource development proponents have an incentive to enter into IBAs with Aboriginal groups to obtain consent from stakeholders to access the land for resource development, obtain labour locally and create a co-operative working relationship (Caine and Krogman, 2010).

5. Conclusion: the emergence of governance as corporate stakeholder management

The extractive industry activities have had a great impact on the social, cultural and environmental realities in the extractive hot

[7] Although they may become legally binding if the parties involved agree to this.

zone of Alberta in general and in Conklin in particular. Environmentally, as well as socially and culturally, the burden shouldered by local ecosystems and Aboriginal communities is substantial, and has added to a prolonged, historical conflict between the Crown and its Aboriginal citizens over rights and entitlements. This complex relationship has led to substantial challenges for all stakeholders in the extractive hot zone.

In response to these challenges, the federal duty to consult, along with provincial EIAs and locally negotiated IBAs, have all been delegated to industry, representing component parts on different levels of a nested governance structure, where corporate responses in the form of CSR and stakeholder management are positioned as an important centre-piece. This delegation has been legitimized on pragmatic grounds, underscoring industry's better positioning to consult the stakeholders, assess its own impact and negotiate compensation and benefit agreements. I have identified an interrelated, nested and multiscalar governance structure emerging from these four distinct governance features (Consultations, EIAs, IBAs, CSR) that can be viewed as a joint mobilizing effort by government, extractive industry proponents and Aboriginal communities to realize a workable, win–win regulatory environment in the extractive hot zone (Fig. 3).

These are all recognizable features in the governance regime of the extractive hot zone, where the emphasis is on a smooth transition from a highly political space—understood as Mouffe's space of power, conflict and antagonism—to governance, or rather processes, instruments and narratives such as "multi-stakeholderism", "community" and "partnership" (For elaborations on this issue, see Eyford, 2015; Gogal et al., 2005; Kennett, 1999). This structure is designed to govern the extractive hot zone, where agreements are claimed to be in the mutual interest, where communities and corporations are rhetorically inseparable and where the survival of a company and the industry become the common objective for all stakeholders: "Without the oil sands, the community loses everything!" (Fort McKay Métis, 12.10.2015, social media update). Hence, notions of this governance practice as a positive-sum game are reinforced; the confidential nature of the IBAs ensures that this claimed mutual interest is upheld, turning local communities into silent, complacent stakeholders.

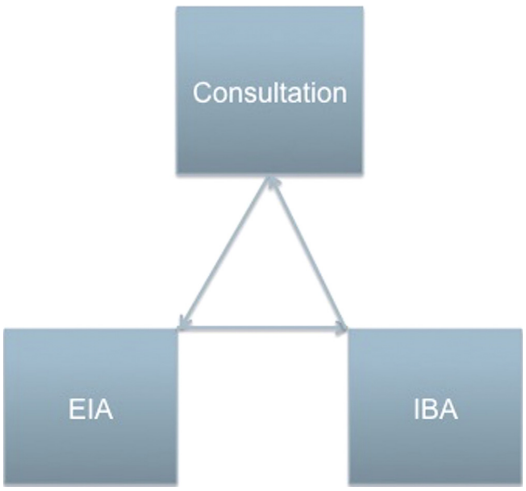

Fig. 3. Governance transformed into CSR (author's own graphic).

Consequently, the Alberta government has put private interests in the driver's seat in the governance of the extractive hot zone by encouraging companies to comply with international CSR standards, *and* by facilitating "beyond compliance activities" through the combination of delegating consultation with Aboriginal communities to the companies, ensuring environmental impact (self)-assessments conducted by the companies, and letting the corporations negotiate IBAs bilaterally with the concerned communities. This incremental change in corporate practices can be viewed as a response to changing governing preferences, where negotiations, consensus and positive-sum games akin to a post-political condition are preferred to political competition over resources. This is based on a corresponding increased maturity in CSR implementation among primarily multinational companies. Here, traditional philanthropic, standardized and image-based CSR has been replaced by allegedly collaborative, performance-driven and integrated practice. However, empirical evidence from this case study shows that risk management remains the central driver of CSR and stakeholder management. Future research must determine whether industry has the resources and competencies to carry this acquired responsibility for local development actively and over time, and what happens when investments dry up and industry leaves.

Furthermore, although there may be sound arguments for this emerging, pragmatic governance structure centred around CSR (and I humbly believe this article represents one such argument), there are serious pitfalls related to the lack of transparency and potentially inadequate participation of certain vital stakeholders in the process. These pitfalls are partly reflected in the remaining strong oppositional voices raised in the extractive hot zone, particularly among indigenous communities and interest groups (Black et al., 2014; Dow, 2012; Foster, 2008; Le Billon and Carter, 2012; Nikiforuk, 2010). More importantly, this governance cum CSR corresponds with the general trend of a post-political condition within the extractive hot zone of Alberta. We can predict some potential shortcomings in the governance structure, particularly from its consent-producing IBAs. With lucrative, confidential business agreements waiting at the end of a resource-demanding and tiring governance process, the possibility of bias in favour of industry development is high among the Aboriginal communities in both consultations and EIAs.

The role of government as regulator in this governance triangle is severely challenged by these bilaterally negotiated, confidential IBAs between industry and community. A first step towards a more transparent process should be to establish tripartite forums for these negotiations, where the local communities, the municipality responsible for local service delivery and the company sit down to agree on social investment needs and joint social programming.

However, the vital importance of stakeholder leverage in such negotiations also results in increased focus on documenting traditional land use among local Aboriginal communities. This documentation is considered in conjunction with claims of cumulative environmental impact by existing and planned industrial developments: "Monitoring of prospect licensing by the government and mapping of historic and present traditional land use practices are important parts of our activities today" (interview with consultant, 2015). Together with competence building related to negotiations, these activities are all part of the new reality of Aboriginal communities. Hence, the communities themselves are calibrating their participatory role in the emerging governance processes in the extractive hot zone to strengthen their negotiating power. In this way, they underscore

the basic insight that there is no such thing as a post-political society.

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Original article

Understanding indigenous strategic pragmatism: Métis engagement with extractive industry developments in the Canadian North

Tarje Iversen Wanvik[a,*], Ken Caine[b]

[a] University of Bergen, Norway
[b] University of Alberta, Canada

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ABSTRACT

Although an understanding of the empowerment of indigenous communities facing extractive industrial developments is growing, most academic research still favours conventional conceptualizations of local indigenous communities as subject to circumstance and which are pushed even further to the fringes of their lands by external forces threatening to extinguish their traditional ways of life. However, this conventional understanding of industrial-indigenous relations falls short on explaining recent developments in the indigenous Metis communities of northern Alberta. Several of these indigenous communities have mobilized a variety of resources to increase their leverage and expand their rights in the midst of oil sand development. Rather than being subject to circumstance, we argue that indigenous communities often seize the moment through strategic and pragmatic engagement with their ever-changing environments. By analyzing the current mobilization of resources among three indigenous Métis communities in the regional municipality of Wood Buffalo, Alberta, we developed an empirically grounded framework for understanding indigenous strategic pragmatism and the output, outcomes and impact of indigenous engagement with extractive industry developments.

Introduction: research on extractive industries and indigenous encounters

Traditional indigenous cultures in the Canadian North are conventionally portrayed as a "unique set of beliefs and practices, which have successfully sustained aboriginal peoples physically, socially, and spiritually, since time immemorial".[1] (Angell and Parkins, 2011). External disturbances, often represented by colonial or post-colonial industrial extraction activities and impacts on traditional territories (Justus and Simonetta, 1979, 1982; LeClerc and Keeling, 2015), have been associated with cultural discontinuity leading to high rates of depression, alcoholism, suicide and violence in many indigenous communities (Kirmayer et al., 2000).

The governance of relationships between extractive industries and indigenous people is characterized by the comprehensive delegation of power from state institutions to industry (Wanvik, 2016; Fidler, 2010; Lawrence and Macklem, 2000; Caine and Krogman, 2010; Harvey and Bice, 2014; Prno and Scott Slocombe, 2012; O'Faircheallaigh, 2007; Arena et al., 2015; Jenkins and Yakovleva, 2006). For decades, the asymmetrical context of the Canadian North, with its economically disadvantaged rural indigenous communities and explosive economic growth in urban cores (fuelled by ever-expanding extractive industries), has been a concern for social scientists from all disciplines (Angell and Parkins, 2011; Sherval, 2015; LeClerc and Keeling, 2015; Veltmeyer and Bowles, 2014; Young, 2016). Scholarship on indigenous responses to extraction industries in the Canadian North can be described as a continuum with two distinct phases: the *community impact* period (1970–1995), which was marked by emphases on social pathologies and social disruption, the politics of assimilation, the sociology of disturbance and the anthropology of acculturation (see for example Justus and Simonetta, 1979; Erikson, 1976; Waldrum, 1988); and the *community continuity* period (1996 to present), which underscored the growing political empowerment of indigenous communities through cultural

* Corresponding author.
E-mail address: tarje.wanvik@uib.no (T.I. Wanvik).

[1] In this paper, we primarily use the term 'indigenous', but we also use 'aboriginal' when it explicitly refers to documents or when groups use it to describe themselves. 'Aboriginal Peoples' is the collective term for Métis, First Nations and Inuit that has been widely adopted by the Canadian government and many indigenous groups, and it was sanctified by law in Section 35(2) of the *Constitution Act, 1982*. The Canadian government now acknowledges the term 'Indigenous Peoples' and recognizes their international legal rights under the United Nations Declaration of the Rights of Indigenous Peoples.

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resistance (Barker, 2015), political inclusion in participatory governance processes (Fidler, 2010; Lawrence and Macklem, 2000; Gibson and Klinck, 2005; Harvey and Bice, 2014; O'Faircheallaigh, 1999, 2007, 2010a, 2010b), and attention to traditional knowledge in aboriginal communities (Usher, 2000).

We have stressed the continuous character of these approaches for several reasons. First, the asymmetrical character of the relationship between extractive industry proponents (including the Canadian State apparatus) and indigenous communities surrounding the industrial activities has been seen as skewed and oppressive (Hoberg and Phillips, 2011; Huseman and Short, 2012; Le Billon and Carter, 2012). Second, there is good reason to consider community impacts. The cumulative effects of oil sands developments in Alberta from the 1960s to the 1980s were extremely disruptive (Justus and Simonetta, 1982). They continue to have negative impacts for the local indigenous communities, who are losing trapping areas, seeing declines in traditional activities, experiencing the deterioration of their community's social fabric and losing the ability to control their community life (Fort McKay Sustainability Centre (TLU), 2016; McMurray Metis (TLU), 2015; Conklin Métis Local #193 (TLU), 2012). Third, central to recent scholarship on indigenous responses to extractive developments is the concept of resilience, which explains how externally imposed impacts are experienced and buffered (Gibson and Klinck, 2005). Magis (2010) suggests that resilience pertains to the ability of a system to sustain itself through change via adaptation and occasional transformation, underscoring Healy's definition of indigenous community resilience as the capacity of a distinct community or cultural system to absorb disturbance and reorganize while undergoing change so as to retain key elements of structure and identity that preserve its distinctness (Healey, 2006; Fleming and Ledogar, 2008).

Recognizing the limitations of a 'passive victim' research perspective, contemporary scholars have advocated a new research perspective, one that is more responsive to the changing milieu of northern indigenous peoples and that "recognises Indigenous peoples as conscious (sic), pragmatic actors in cultural change and adaptation" (Angell and Parkins, 2011: 72). The call for a new approach to northern indigenous research stems from the growing political power among northern peoples, their increasing education levels and political astuteness (Hovelsrud and Krupnik, 2006), and the subsequent resurgence of indigenous communities, which was recently illustrated by the 'Idle No More' movement and its reassertion of indigenous sovereignty in opposition to settler colonization (Barker, 2015; Wotherspoon and Hansen, 2013; Coates, 2015).

Scholarship on extractive industries and local communities is not limited to the Canadian North (Aguilar-Støen and Hirsch, 2015; Gamu et al., 2015; Harvey, 2014; Virah-Sawmy, 2015; Wilson and Stammler, 2016). Several scholars have contributed to this body of literature over recent decades, some of whom presented nuanced positions on indigenous responses to industrial development (McNeish, 2012; O'Faircheallaigh, 2013; Stern, 2001; West, 1994). McNeish questions whether the images of indigenous resistance and environmentalism in relation to energy extraction developments in Latin America are not dangerously oversimplified (McNeish, 2012). Instead of stereotypical resistance, local indigenous communities seek dialogue to negotiate settlements that would benefit community development. O'Faircheallaigh discusses a change in approach from industry and state actors to indigenous people in western Australia that led to an increased indigenous capacity to negotiate agreements and signalled the emergence of leverage points that were not available during earlier phases of resource development (O'Faircheallaigh, 2013). In particular, he draws upon West (1994), who claims that marginalized groups can challenge the dominance of major economic interests and the bureaucracies that generally support them as a result of "some structural conditions, substantive issue or historical constellation of forces" (West, 1994, 417). West notes that the capacity to alter systems of domination depends "on strategic use of current structural possibilities and limitations and upon will, determination and mobilization" (West, 1994, 424). Stern supports this view (2001: 218) and advocates a new approach to research that emphasizes how the "Inuit are active participants in the making of their own history" rather than how they are "victims of progress".

Despite these few examples of an emerging sophisticated view of indigenous agency, scholars continue to focus on community resilience, cultural impacts and risks of disturbance to the conditions for and underpinnings of cultural continuity rather than on the transformative and proactive capabilities of these communities. To a certain extent, indigenous people are still portrayed as responsive agents, only consulting on individual industrial development disturbances by invitation from a benevolent power holder (i.e. industry or the state) (Angell and Parkins, 2011; Chandler and Lalonde, 1998; Fleming and Ledogar, 2008). A better understanding of indigenous people's mobilization in support of their own goals and aspirations is required, including information about how they proactively respond to industrial developments as agents in their own right, rather than focusing on their reactive adaptations.

A way of doing this is to underscore the power situation of extractive industry-community relations as more unstable and contingent (Haarstad and Wanvik, 2016). A promising entry into such elaborations is through assemblage thinking (DeLanda, 2006; Deleuze and Guattari, 1988; Deleuze and Parnet, 2007). Assemblage theory provides us with an ontological conceptualization of situations (assemblages) as unstable and shaky. Thus, traditional indigenous agency and skewed power relations that seem to be more or less permanent within contested energy spaces, may occur to be less stable than we normally would recognize. We argue that an analytical framework is needed to properly understand and explain recent developments among indigenous Métis communities[2] in northern Alberta. Several indigenous communities in this region have mobilized a variety of resources to increase their leverage and expand their rights in the midst of the oil sands, counter to how the fate of indigenous communities conventionally has been portrayed. Such transformative competence is nothing new (Pelling, 2010), but it has not been conceptually and comprehensively introduced into studies of indigenous practices. Hence, rather than being subject to circumstance, we argue that indigenous communities seize the moment through *strategic* and *pragmatic* engagement with an ever-changing environment.

This article is organized into five sections. In the next section, we present the rationale for our case study and our methodological and analytical approach. In section 3, we develop our conceptualization of indigenous strategic pragmatism through assemblage thinking (DeLanda, 2006; Deleuze and Guattari, 1988; Deleuze and Parnet, 2007), energized by the notion of power as the mobilization of resources (Allen, 2011a, 2011b) among stakeholders (Carroll and Buchholtz, 2014; Fassin, 2009; Freeman, 2010; Mitchell et al., 1997). In section 4, the primary empirical section, we use our analytical concepts to explore indigenous Métis approaches to industrial developments on their traditional territories. In section 5 we conclude by discussing indigenous strategic pragmatism and

[2] Since the inclusion of the Métis in the Canadian Constitution of 1982, they have been recognized as a distinct indigenous people Wood Buffalo Metis. (2015) Wood Buffalo Metis locals launch collaboration. Fort McMurray, Alberta, Canada: Wood Buffalo Metis. The Métis originally descended from the early encounters between European settlers and First Nations.

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its opportunities as an analytical framework.

The regional municipality of Wood Buffalo is a pertinent case study for understanding how the dynamic between indigenous people and extractive industry development differs from conventional explanations. This region exhibits many of the characteristics of extractive industry developments, including: a socially and

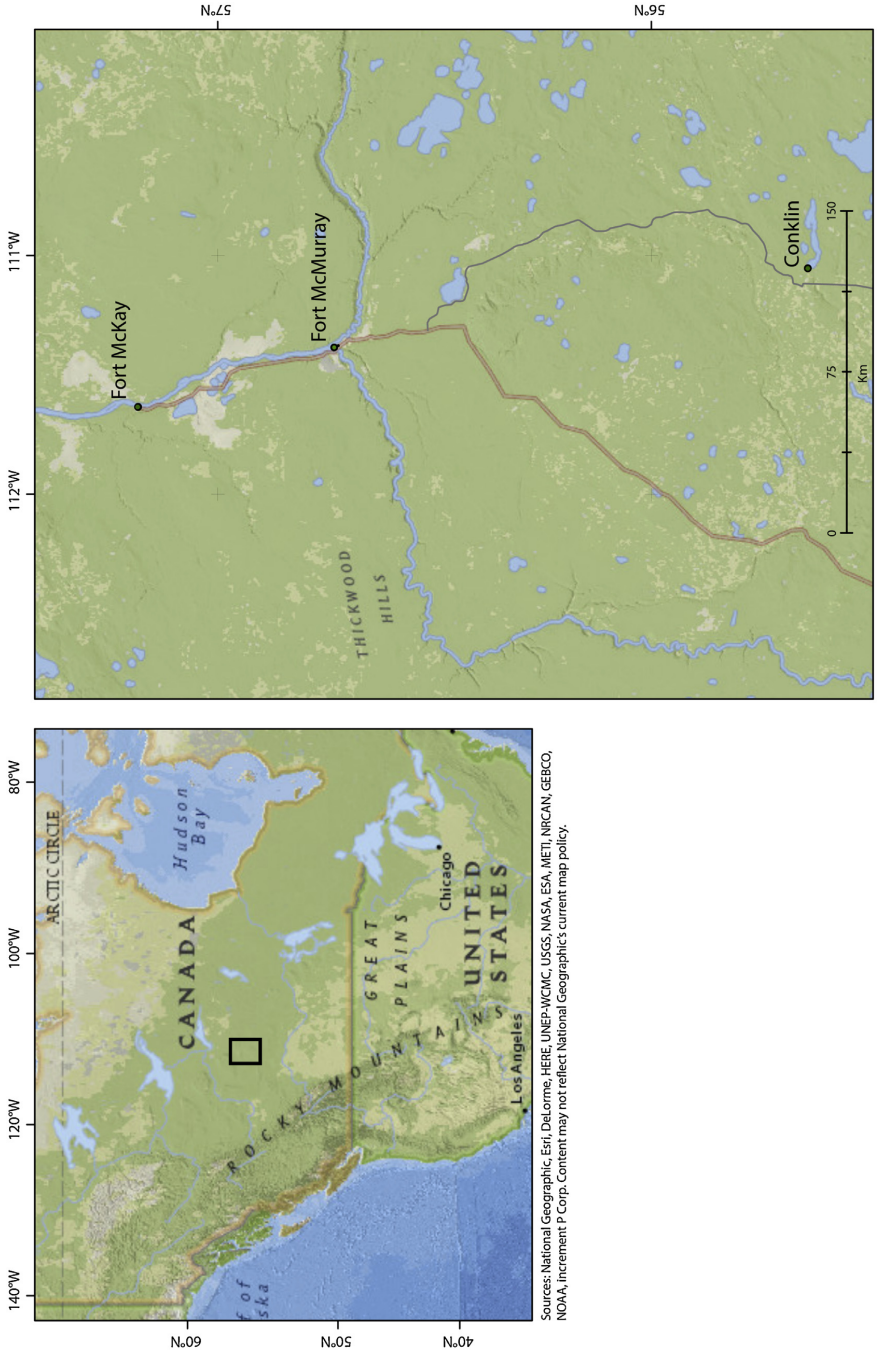

Fig. 1.

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economically marginalized population (O'Faircheallaigh, 2013); a history of extractive industry activity that has imposed cultural and social costs on indigenous people but generated few benefits for them (Huseman and Short, 2012); and provincial and local government institutions and policies that have been strongly supportive of industry (Fluet and Krogman, 2009; Hanson, 2013; Huseman and Short, 2012; Justus and Simonetta, 1982; Taylor and Friedel, 2011; Wanvik, 2016).

Indigenous Métis groups in the region have been largely underrepresented in negotiations over land use rights and the expropriation of traditional indigenous territories (Adams et al., 2013; Andersen, 2008; Chartier, 1994, 1999; Chartrand, 2008; Sawchuk, 1985; Sosa and Keenan, 2001). Their ability to develop their own ways of engaging with state and industry has been precarious, and at the same time (as we shall see), their strategic mobilization of resources has given them a set of properties and emergent capacities that allow them to pragmatically engage with extractive industry developments.

The empirical data for this paper are derived from several sources. Assemblage thinking inspires us to look for unstable and contingent relations – treating communities and institutions as emergent: constantly seeking new and productive alliances. Hence, our methodological choices and sampling strategies have been theoretically informed and purposive (Charmaz, 2014). First, we interviewed 30 community elders and leaders and their hired consultants in three separate but interconnected Métis communities, and we also interviewed oil company managers and personnel. Second, we reviewed the relevant legal frameworks and public policy documents concerning indigenous consultation, and environmental and social impact assessments from the Regional Municipality of Wood Buffalo, the Province of Alberta and the Supreme Court of Canada. Third, five comprehensive traditional land use studies (TLUs) for the three Métis communities and two extensive corporate environmental impact assessments provided a rich foundation and reference source for all of the empirical data. All of the data have been coded and categorised in close dialogue with the existing literature (see chapter 3.0).

We chose these communities because of their interconnectedness and their influence as major Métis communities in the regional municipality of Wood Buffalo. One of them is a high-impact rural community in the middle of the open-pit mining area (Fort McKay Métis), one is a high impact rural community in the steam assisted gravity drainage (SAGD) areas (Conklin Métis), and the last one is an urban community (McMurray Métis).

In the next section, we outline our point of departure for analyzing the pragmatic interactions between extractive industry developments and the indigenous communities in what we call the Wood Buffalo carbonscape.

2. Wood Buffalo as an assemblage

Contemporary geographical theory provides some valuable insights into how we conceptualise places. We consider the extractive development areas of Wood Buffalo, Alberta in particular, as assemblages of material and discursive component parts that are expressions of carbon-based energy systems and the institutional and cultural practices attached to them (DeLanda, 2006; Deleuze and Guattari, 1988; Deleuze and Parnet, 2007; Haarstad and Wanvik, 2016). Elsewhere, these carbon-based assemblages are called 'carbonscapes' (Haarstad and Wanvik, 2016).

The Wood Buffalo carbonscape is situated in north-eastern Alberta (Fig. 1). Until recently, they have been relatively sparsely populated by various indigenous groups of First Nations or Métis origin (Wanvik and Haarstad, 2015). The advent of mining in northern Canada is synonymous with key moments in the colonial history of the indigenous communities in the Canadian boreal forests. Mining in this area brought major social and economic changes, including pollution and landscape-scale environmental changes that compromised local indigenous relationships to their land-based economy (Sandlos and Keeling, 2016).

Although a common theoretical stance is to depict the co-articulation of elements constituting carbonscapes and their extractive industry developments as a coherent totality, or as a stable organic whole with skewed power relationships, Haarstad and Wanvik have proposed carbonscapes as more contingent, unstable and open to change (2016). Assemblage theory gives us a set of conceptual tools with which we can explore and understand this contingency and instability. It dismisses the idea of systems as stable, organic wholes with fixed identities and continuous communities in favour of an ontology of entities without essence that are held together in more or less impermanent relationships (DeLanda, 2006). Assemblage theory provides us with a set of tools to analyse socio-material processes that either work to either uphold (territorialize) or change (de-territorialize) the assemblage; DeLanda (2006) characterizes the component parts of assemblages in terms of their emergent capacities, which are properties that are contingent upon their interactions with other component parts, the so-called 'relations of exteriority'. To acknowledge and appreciate the proactive participation of different component parts of the Canadian North, assemblage theory is employed to understand and analyse the ephemeral constellations of social and material expressive and physical elements that people use in given situations (Allen, 2011a; McFarlane and Anderson, 2011; Ogden et al., 2013; Tsing, 2005), and thereby underscoring the impermanence and changeability of the apparent power structure of contested energy spaces.

3. Conceptualizing indigenous strategic pragmatism

Indigeneity rarely connotes innovation and flexibility in the literature. On the contrary, evidence of continuing, fixed, traditional land-use practices, language, culture and beliefs are seen as essential for most conventional identifiers of indigenous peoples (Fenelon and Hall, 2008), as are historic continuity, distinctiveness, marginalization, self-identity and self-governance (Dove, 2006). Arguably, changes to the social, cultural, economic and political northern landscape have led to changes in the relationships, practices and capabilities of northern indigenous peoples when dealing with industry and the government.[3]

According to Metis legal scholar and the great grandniece of Louis Riel,[4] Jean Teillet (2013), Métis indigeneity does not easily subscribe to presuppositions of fixity or reactive responses. In fact, the very concept of the Métis as a people is said to challenge the established boundaries of culture in Canada. From the beginning, the Métis have defined themselves precisely by an ability to construct and reproduce a unique but vibrant and transformative socio-economic system and culture at the interstices of Indigenous and Euro-Canadian societies (Clark et al., 2015), building strategic alliances across cultural and economic divides.

Strategic relations traverse history, and these relations are necessarily unstable and subject to change (Faubion, 1994; Foucault et al., 1997). Alliances are made, or co-functions emerge, between various component parts. Hence, the claim that power is produced or generated by strategic alliances or co-functioning

[3] Amendments to the Indian Act, which now allows First Nations communities to take legal action, and the subsequent important role of court cases have strongly contributed to these changes.

[4] Louis Riel (1844–1885) was the founder of the Province of Manitoba, and a central figure in the Red River and north-west resistances.

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distinguishes the concept of power from an inscribed capacity (Allen, 2011a, 2011b) and underpins the notion of the emergent capacities of component parts (DeLanda, 2006). All of these strategic relationships are local, regional forms of power that have their own ways of functioning and their own procedures and techniques. Therefore, we cannot speak of power. Instead, we must speak of powers, and try to localize them in their historical and geographical specificity. We propose that such a conceptualization of power is suggestive of a certain form of pragmatism (Jones, 2008). Co-functioning, or the pooling of resources in specific events or situations, produces power. Component parts may occasionally align, or pool their resources with other component parts, as a means of securing common goals (Allen, 1997, 2003, 2011a, 2011b). Drawing on Foucault, we can say that the Wood Buffalo carbonscape is an archipelago of different powers (Foucault, 2007, 156). The carbonscape assemblage is not a unitary body in which one power (and power only) exercises itself; in reality, it is a situation; a liaising and a co-ordination of different powers and interests that nonetheless retain their specificity.

Situations create a variety of interests (or stakes) among the component parts (or stakeholders) of the assemblage. Thus component parts may be defined as stakeholders in a given situation. Although stakeholder theory primarily focuses on the management of companies and their operative environments (Carroll and Buchholtz, 2014; Fassin, 2009; Freeman, 2010), we argue for a broader scope in which a stakeholder framework can be used in concert with assemblage theory in order to shed some light on stakeholder relationships within particular situations, such as the extractive energy landscapes of Alberta, where different component parts have different interests or stakes in the production of the Wood Buffalo carbonscape. However, the ability to defend these interests varies greatly between stakeholders. We have coded our empirical material in close dialogue with the theoretical literature, and mapped and explored linkages and relations between different concepts and findings through situational analysis (Clarke, 2005, 2003). From this systematisation we have yielded conceptual ideas around stakeholder properties, acquired stakeholder properties through diverse alliances (outputs), emergent capacities (outcomes), and long-term impacts (see chapter 4.1 – 4.6). These concepts will constitute the backbone of the following analysis. In our empirical data, we have bundled stakeholder properties into three categories: 1) strength, 2) urgency and 3) legitimacy. Stakeholder strength is closely related to the number of members and the amount of funds or other types of resources that amplify the stakeholder's position. Stakeholder urgency underscores how important the time factor is and how critical the stakeholder's expectations are. Stakeholder legitimacy refers to the status of the stakeholder's claim or interest, which is most commonly related to consultative status for indigenous communities. Fig. 2 shows a standardized stakeholder with all properties equally high (strength, urgency and legitimacy = high), signifying an ultimate stakeholder (Mitchell et al., 1997).

All of the properties are relationally defined, which indicates that the value of each property could depend upon the situation in which it is used. By approaching indigenous communities as goal-motivated, pragmatic component parts of the Wood Buffalo carbonscape, we seek to energize the conceptual frameworks of assemblage theory with a more practical vocabulary of strategic pragmatism. Hence, we refer to processes that work to stabilize or destabilize the assemblage as the *mobilization of resources*, wherein component parts align to generate power to change or uphold the assemblage. We refer to the properties acquired by component parts and their mobilization as *outputs*, underscoring the short-term potential character of properties if they are not activated. We refer to the capacities that emerge from the outputs as *outcomes*, to acknowledge the more long-term emergent effects of the co-functioning and aligning of component parts. The longer term fundamental changes in the assemblage composition that derive from these processes we term *impacts*, which is what others have called re-territorialization (Wanvik and Hidle, 2013; DeLanda, 2006).

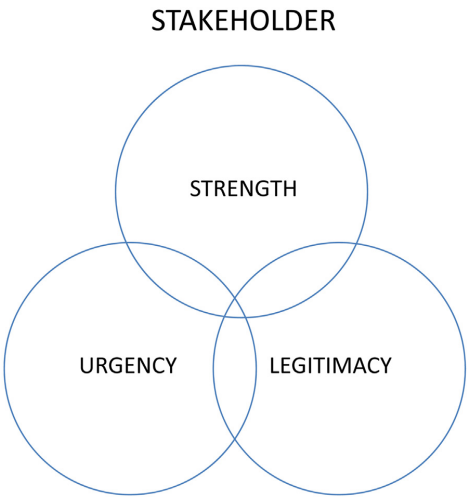

Fig 2. Stakeholder properties (based on Mitchell et al., 1997).

With this conceptual framework based on the combination of assemblage theory and theories of power as the mobilizing of resources among stakeholders, we now examine recent developments in three Métis communities in Wood Buffalo. We let the representatives of different stakeholders recall how the indigenous communities have mobilized different kinds of resources, leading to the acquisition of beneficial outputs (properties), outcomes (capacities) and impacts.

4. Employing strategic pragmatism

Change is something Métis

1- Interview with Elder, McMurray Métis, 2016

Denied the very existence of their collective title to land by the federal government, the Métis must instead find other ways of advocating their right to recognition and self-determination (Dubois and Saunders, 2013; Madden, 2008; Weinstein, 2007). Indigenous Métis communities in this study regard themselves as rather small, with fewer than 300 members in each community (strength = low). Moreover, even in areas where they have come into direct contact with extractive activities, they consider themselves to have a low degree of de facto legitimacy (legitimacy = low) because the Alberta government has not granted them consultative status as indigenous people. However, they most certainly claim legitimacy as right-bearing communities, and there is a strong degree of urgency (urgency = high) to their claims due to the threat to traditional land use practices posed by industrial developments. Thus, as we will see, to strengthen their position as stakeholders, indigenous Métis communities strategically mobilize resources (legitimacy and strength) by engaging other stakeholders (Fig. 3).

4.1. Mobilizing legitimacy and strength through coalitions

It has been critical for Métis communities to manoeuvre into negotiating position with industry. There has been no easy path to

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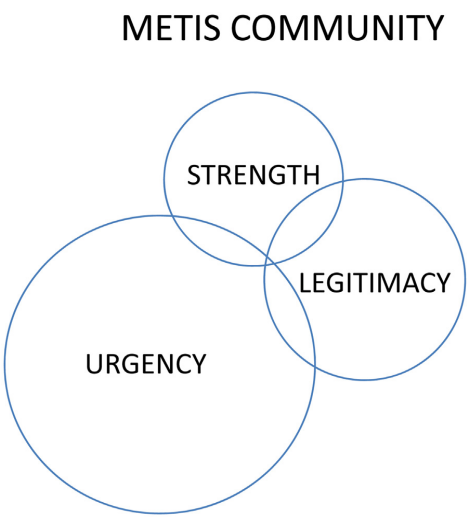

Fig. 3. Métis properties.

negotiating with industry representatives without formal political consultative status for Métis communities; therefore, they have had to explore other pragmatic strategies. For the Fort McKay Métis, the aligning of interests between the Métis and First Nation communities was the first step in a mutual effort to sign privately negotiated community–industry impact benefits agreements (IBAs):

> When we started working with industry, we were the first Metis community to sign an impact benefits agreement. The reason we managed to do it was because we piggybacked the First Nation. The First Nation included us in the process to gain a larger head count, which enabled us to sign an agreement. [Interview, President, Fort McKay Métis, 2015]

In the First Nation community of Fort McKay, which is adjacent to the Métis community, there is a close kinship between the two groups, and to some extent, they share parts of each other's traditional lands:

> First nations represented the Métis, and did a number of studies, probably 30–50 studies, proving that both communities overlap. We have been able to use that as leverage [Interview, President, Fort McKay, 2015]

First Nations already have consultative status according to the Alberta consultation policy (Government of Alberta, 2014). By strategically joining the First Nation in their negotiations with industry, the Fort McKay Métis gained sufficient legitimacy to participate, even as an independent community: "They needed us and we needed them" (CEO, Fort McKay Métis, interview 2016).

Today, the Métis continue to negotiate on their own, albeit without formal consultative status, proving that, to some extent, precedents established their emergent consultative capacity: "We have negotiated four, soon to be five, agreements on our own now. They all are long-term, 40-year agreements" (President, Fort McKay Métis, interview 2016). Using our empirical findings to illustrate the mobilizing of legitimacy and strength by aligning with the neighbouring First Nation community, Fig. 4 shows the relationship between the two component parts and their self-proclaimed properties.

According to our informants, the indigenous groups compensated for both groups' deficiency in numbers (strength = low/medium) by joining forces. What the Métis community lacked in consultative status (legitimacy = low) and negotiating capacity (strength = low), they gained by aligning with a group that has such status. By engaging First Nation properties, the Métis gain an emergent capacity of having a negotiating position with industry on their own.

4.2. Mobilizing legitimacy and strength through external competence

Our informants acknowledged that local communities are more capable of 'playing' the different stakeholders now than they were before. In particular, hiring external consultants to facilitate and accommodate organizational development and advocacy work has contributed to capacity development and the expansion of social and symbolic capital (Caine, 2016): "We hire the best person for the job, and I don't care if he or she is white or black or even Muslim" (Elder, McMurray Métis, interview 2016). All three of the communities in this study have used industry funding to hire external management staff with competence in organizational development, negotiations and public policy. One of our informants underscored the importance of these external resources:

> [Consultant A, B, C, D] they all helped me to get off the ground. [Consultant A] because he is university educated. He did his thesis on the Métis. He understood the community. [Consultant B] came from the Faculty of Native Studies. He had worked for the Regional Municipality of Wood Buffalo as manager for rural services. He worked for me for two years, and then went to Conklin because they were in bigger need than us. [Interview, President, Fort McKay Métis, 2016]

This informant acknowledges the value of external consultants for his own personal development as a Métis leader. In addition, these resource persons have been moving between stakeholders,

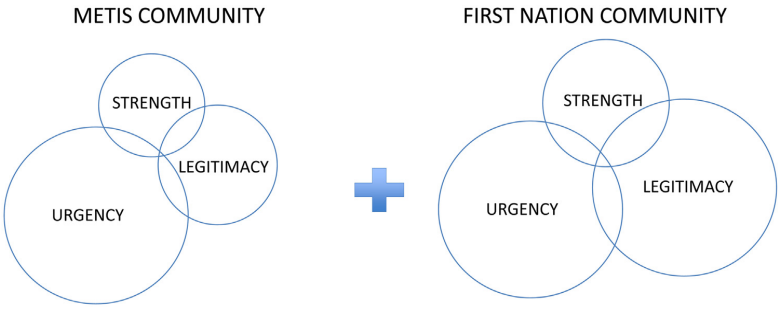

Fig. 4. Strategic mobilising of legitimacy and strength through alliance building.

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sharing and spreading their competence among the three Métis communities. Another informant addressed the same issue:

> You know, these people move around, right? You know that [Consultant B] used to work for the municipality, right? Now he works for the Conklin Métis. And before that, he worked for the Fort McKay Métis. And [Consultant A] previously worked for the Fort McKay Métis, now he is with us. [Interview, CEO, McMurray Métis, 2016]

External competence has become part and parcel of the organizational processes of the three Métis communities:

> We have been busy, [Consultant C] has been busy. [Consultant C] has been our negotiator, and we have hired a very good law firm out of Calgary; they look after us well. They look after labour law, environmental law, and the like. [Interview, President, Fort McKay Métis, 2016]

There is also a scalar dimension to the hiring of external competence. With these resource persons, the Métis communities even gained access to decision makers at the federal level:

> The previous CEO [externally hired] was good with contracts, you see? I told him, there is a good chance you will go to Ottawa [federal government], and I need a contact there. He got a job there now, and so far he set us up with two ministers now, Indian and northern affairs, and infrastructure. He has paid off long time ago. Even the prime minister came to see us. I have never seen anybody like him, man. He pushed me, you know [. . .]; he told me to marry politics and economics to get things done, eh? [Interview, Elder, McMurray Métis, 2016]

This informant echoes the importance of external competence regarding his own personal development, but he also states how external experts remain assets for the communities after they have moved on. To illustrate the mobilizing of legitimacy and the strength acquired by hiring external experts and consultants, Fig. 5 shows the proposed relationship between the two component parts and their properties.

According to our informants, the lack of strength and legitimacy among Métis communities (=low) was compensated for by the consultants' specific competencies in advocacy, organizational development and negotiating skills, in addition to their networks and contacts with decision makers at local, regional or federal levels.

4.3. Mobilizing strength through industry agreements

We learn of another kind of aligning of interests from the Conklin Métis that underscores the benefits of shared interests between local indigenous communities and the extractive industry:

> The indigenous groups are more empowered now than ever, more vocal than ever, and more involved. When they [indigenous groups] are not being recognized, all of that comes into the mix when industry tries to operate. [Interview, CSR manager, Statoil Canada, 2015]

Corporate motivation for engaging with local indigenous communities can be divided into three categories: 1) managing risk, 2) creating a loyal working environment and 3) developing a pool of skilled local labour (Wanvik, 2016). Legal consultants working with the local communities were of the view that:

> Most indigenous Métis communities recognize that the regulatory process is biased in favour of extractive industry development, and communities seek economic and contracting benefits because the choices they are faced with are either having development proceed and receiving some benefit from it, or having development proceed and receiving no benefit at all from it. [Interview, Community lawyer, email correspondence, 2015]

This statement is supported by our findings from the Métis community leaders:

> You can fight the oil sands and get nothing, or you can play with them, and get something back. Industry is all the same; it is either their way or the highway. But they want to play with us because they know that we can stop industry with our rights. [Interview, Elder, McMurray Métis, 2016]

Taken together, our findings point to a shared understanding of the need for a pragmatic alignment of interests between communities and companies. To illustrate this, Fig. 6 shows the relationship between the two component parts and their properties: for the Métis, companies are first and foremost approached for achieving financial support (strength = high), which enables them to increase their leverage, support local development and welfare, and to document their traditional territory and land use practices (as we shall see in the next section).

In short, the territorializing processes of mobilizing resources to strengthen the Métis communities are important factors in the relational game of carbonscapes. Different component parts engage each other, negotiate, and find common ground to move forward. In the following, we look at the realization of short-term properties (outputs) and how these properties are invested in real and envisioned outcomes to produce emerging capacities for change and improvements in community well-being and political leverage.

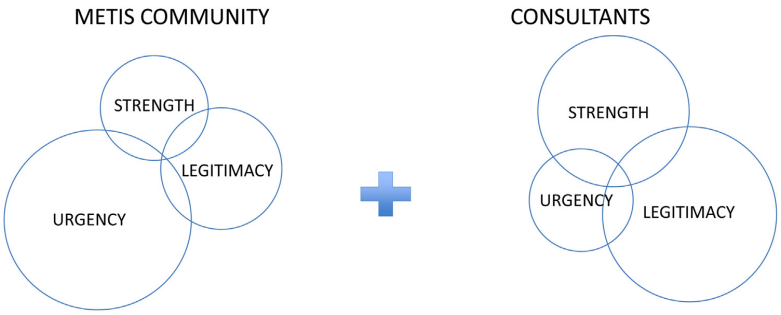

Fig. 5. Strategic mobilising of legitimacy and strength through hiring of external experts.

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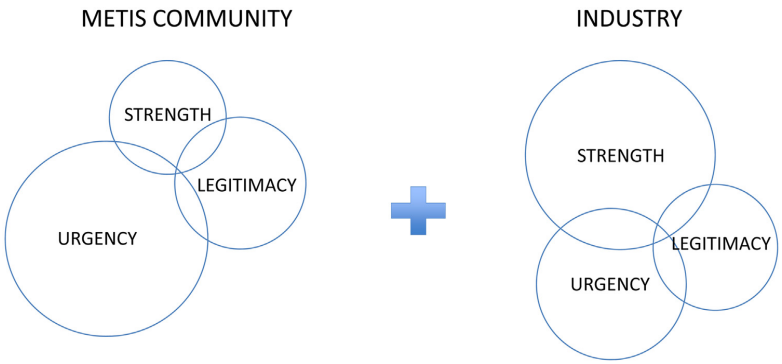

Fig. 6. Strategic mobilising of strength through alliance with industry.

4.4. Outputs: properties acquired through impact benefits agreements

The major output of the strategic mobilization of resources has been the formalization of agreements between the Métis communities and different extractive companies. In the past, these agreements were rooted in government policies that focused on achieving indigenous economic and employment development objectives through non-renewable resource development (Hitch, 2006, 59–60). Today, these agreements are commonly referred to as IBAs, which are privately negotiated agreements, typically between extractive industries and local communities, whereby the government is relegated to an external, observational role. IBAs establish formal relationships between signatories, mitigating negative development impacts and enhancing positive development outcomes for indigenous communities (O'Faircheallaigh, 1999; 2007; Wanvik, 2016):

> We used to say, 'you have a project, give us a business contract, and we let you do your project'. We did not look after the bigger picture. So we started working with IBAs. We were the first Métis community to sign an IBA. [Interview, President Fort McKay Métis, 2016]

These agreements have primarily focused on properties such as local employment and economic benefits (Statoil Canada, 2007), whereas more recent IBA constructions acknowledge the need for greater flexibility and diversity of community involvement in industrial decisions, as well as the need for social and cultural programs, dispute resolution mechanisms, revenue-sharing provisions and environmental restrictions (Caine and Krogman, 2010; Dreyer and Myers, 2005; Gibson, 2008; Sosa and Keenan, 2001):

> These agreements have provided communities with direct funding support for physical, social, and human infrastructure, as well as contracting opportunities for company businesses and a process to address environmental issues involving future developments. [Interview, Community lawyer, email correspondence, 2014]

Resource development proponents have an incentive to enter into IBAs with indigenous communities to obtain indigenous communities' consent for access to their lands for resource development, obtain labour locally and create a co-operative working relationship (Caine and Krogman, 2010; Wanvik, 2016). However, there are challenges related to the sustainability of these agreements. Industrial partners may not have the resources and competencies to actively maintain local development over time, and it is not clear what happens when investments dry up and industry leaves (Wanvik, 2016). Other mediated challenges concern the region's heavy dependence on the oil industry:

> Diversification is really important to us now, with the downturn. We are not putting all our eggs in one basket in terms of serving the oil sands. We are looking at tourism, foods and beverages, and so on. Sustainability is everything. [. . .] If I leave, and the community cannot sustain itself, for me that is a failure. [Interview, President, Fort McKay Métis, 2016]

IBAs have enabled the Métis communities in many ways as business partners and subcontractors, as historic, rights-bearing communities, and as educational institutions for their own youth population. However, it is hoped that the main outcome of these IBAs is that they outlive the industrial developments of the Wood Buffalo carbonscape, which leads us to traditional land use studies (TLUs).

4.5. Outcomes: capacities activated through traditional land use studies

Among the outcomes of IBAs are TLUs, which may be the most influential factor related to indigenous community capacity building. Indigenous communities use TLUs as territorializing tools to identify and assess their traditional land use practices to claim compensation for or exert influence on extractive industry developments. All three of the studied Métis communities have made comprehensive TLUs (some of them have made several) in the course of industry negotiations (Clark et al., 2015; Conklin Métis Local #193 (TLU), 2012; Fort McKay Sustainability Centre (TLU), 2016; McMurray Metis (TLU), 2015):

> We are still struggling to get acknowledgement as a right-based community. Thank God, we did our homework. Industry paid for it. We needed that. I got financial support to record my elders, so in the early 2000s, we got their stories (referred to as Clark et al., 2015) [. . .]. That was the one that made a change. [Interview, Elder, McMurray Métis, 2016]

The importance of TLUs can hardly be overestimated among our informants:

> Suddenly, we have our land use practices in writing, on the coffee tables of decision makers and industry, where they can read about our territory. All of a sudden, there is that truth to it, yeah? Do people read it? Sure! They got no choice now, right? [Interview, Elder, McMurray Métis, 2016]

Industry seems to acknowledge the implications of their support for indigenous communities:

> We help fund traditional land use studies (referred to as Conklin Métis Local #193 (TLU), 2012) and cultural initiatives. They have been asking for this for decades, but eventually, it is the industry

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that is providing the studies. I would not be surprised if this is used for cumulative effects documentation to press for results on some of the long-standing debates and conflicts with government over land because they are no longer able to exercise traditional rights. [Interview, CSR manager, Statoil Canada, 2015]

These outcomes are generating increased capacity building among the Métis communities, underscoring the territorializing function of these TLUs and the direct impact they have on negotiations with industry:

Monitoring of prospect licensing by the government and mapping of historic and present traditional land use practices are important parts of our activities today. [Interview, McMurray consultant A, 2015]

Together with competence building related to negotiations, these activities are all part of the new reality of indigenous communities. Hence, the communities themselves are calibrating their participatory role in the emerging governance processes in the Wood Buffalo carbonscape to strengthen indigenous Métis negotiating power.

4.6. Impacts: alliance building and re-territorializing processes

The strategic mobilization of resources, the formalization of IBAs and the subsequent increased focus on TLUs to document historic practices, have all contributed to substantial collaboration between the Métis communities of Wood Buffalo. In 2015, the Métis communities of Conklin, Fort McMurray, Fort McKay and Anzac formed the Wood Buffalo Métis (McDermott, 2015):

The alliance of the Wood Buffalo Métis, primarily designed by the Fort McMurray Métis, has been trying to build some leverage towards the local government, but primarily towards the province. [Interview, McMurray Métis consultant A, 2016]

Because each community is too small on its own, the Métis communities need to work together to have their voices heard. By sharing competence through the exchange of external consultants and hired experts, and by reactivating and strengthening historic bonds through the TLUs, the Métis communities of Wood Buffalo grew closer together:

Because of the One Nation view of the Métis, we are not like many First Nations, you know, like a nation here, a nation there. The Métis think a little differently, right? We are communities within a bigger community, a Métis Nation, so we are nationalists to that extent, so to speak, so it is a natural for us to think that we are part of the same community. [Interview, CEO, Fort McKay Métis, 2016]

This notion feeds into the narrative of Métis collaboration across communities, with one common goal:

Together, we have made many moves, all through teamwork. When we are recognized as a rights-bearing community, much will have to change. [Interview, Elder, McMurray Métis, 2016]

So we witness the evolution of a truly strategic and pragmatic political agency comprising several indigenous Métis communities capable of mobilizing resources to increase their influence and strengthen their rights vis-à-vis government institutions and industry in the Wood Buffalo carbonscape. They gain financial support by negotiating IBAs; they invest in TLUs and make decisions about the procurement of additional competencies and the hiring of management staff; and they capitalize on these capacities by creating new and more powerful coalitions and alliances.

5. Conclusion: Métis strategic pragmatism

In this paper, we have activated assemblage thinking as a basis for an analytical framework to examine indigenous Métis communities in the Wood Buffalo carbonscape. Our analysis revealed that indigenous engagement with extractive industry developments is neither static nor responsive in character. Rather, indigenous communities creatively and proactively engage extractive industry developments on their traditional territories as strategic pragmatists. We identified the conceptual framework of strategic pragmatism by applying assemblage theory as a basis for understanding the complex relationships between indigenous groups and extractive industry development proponents.

Ontologies challenge our conceptualizations of the world. Viewing the interactions between the different component parts of the Wood Buffalo carbonscape as the workings of an unstable and changeable assemblage reconfigures the way we interpret indigenous engagement: we no longer see them as passive victims or as only responsive to external pressure; we now see indigenous communities as goal-motivated, pragmatic component parts of the Wood Buffalo carbonscape.

Through strategic pragmatism, we have shown that indigenous communities have substantial transformative capabilities imbued in their traditional ways of life. These transformative capabilities include their ability to mobilize certain strategically and/or tactically important resources (urgency, legitimacy and strength), turning them into properties (formalized IBAs) and capacities (TLUs). In turn, these capacities have moved the Métis communities in this study into more formalized alliances. Thus, we have seen how Métis communities strive to evolve and change to harvest strategic resources to their benefit:

If you do not change, everything else moves, right? So you have to change. I want to establish a solid foundation. We need people that want to make change. If I do not change, this will continue forever, right? I gotta do what I can, and with time we will win (Interview, Elder, McMurray Métis, 2016).

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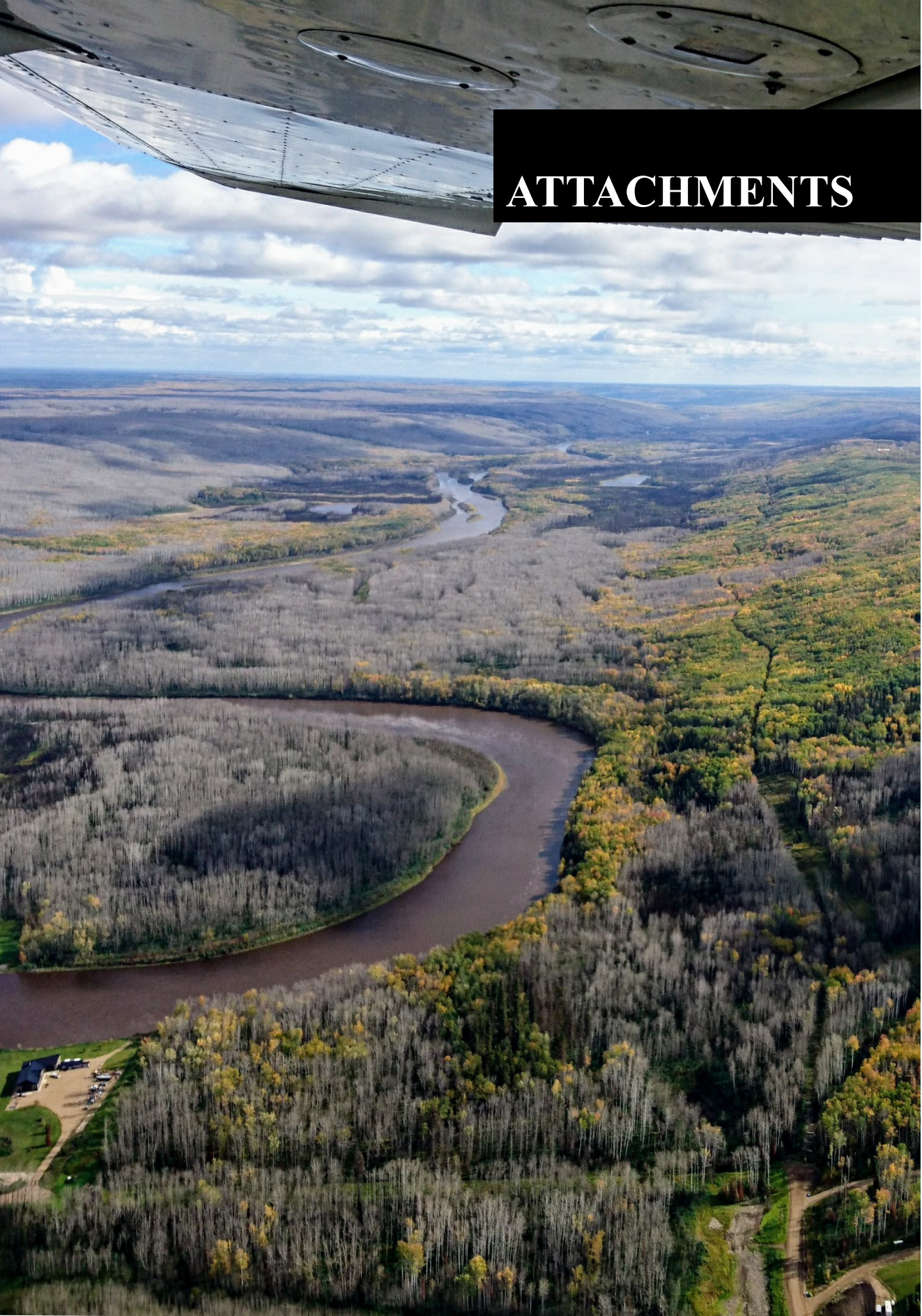

ATTACHMENTS

Abstracts of academic papers

Paper #1

Extractive zones are contested: they are both positions on global industrial energy world maps, and at the same time they are heavily influenced by local social worlds and the materiality that shapes them. They cannot be understood as one without the other. There are dynamics - interaction, conflicts and interactions - between the processes that constitute the geographies of contested energy spaces. We believe this challenges the theoretical understandings of place, and it challenges the Norwegian extractive companies 'understanding of the foreign areas they operate. It challenges us to explore how power, scale and materiality in interaction can be understood as constitutive of places' existence and characteristics. To help us unpack this challenge, we choose to draw on Manuel DeLandas theory of assemblages. DeLanda (2006) has developed a socio-spatial theory that in new ways brings out and recognizes the complexity and dynamics of the relationships between people and their environment. Employing different socio-spatial formations, such as scale, networks, territory and power can help to create knowledge and understanding how power and influence unfolds on what can be coined a modern battlefield: the global-and-local primary commodity zones.

Paper #2

Geographers tend to see energy systems as intricately interwoven with society and relatively resistant to change. We argue that there is a danger of exaggerating the permanence and stability of the energy–society relationship. Therefore we propose a framework that is more open to instability and transformation. Using assemblage theory, we frame the social and material landscapes of oil – carbonscapes – as having emergent capacities for change built into their relations of exteriority. We illustrate this by discussing instabilities at particular points within the global oil production network: extractive hot zones, energy distribution infra- structures, and urban spaces of consumption and practice.

Paper #3

In the contested space of energy production in Canada, tension and a series of disputes over land and rights have arisen between the state, industry and local Aboriginal communities. Canadian governments have long exploited the bountiful natural resources of the land, while at the same time attempting to reconcile a difficult relationship with its Aboriginal

communities. This case study reveals how the government has yielded responsibility to industry to resolve the many governance challenges of Canada's extractive hot zone. Through substantial delegation of governance duties to industry, the Canadian Government has placed large parts of its regulatory toolbox in the hands of multinational Corporate Social Responsibility (CSR) departments, and hence turned social and environmental planning and programming into corporate stakeholder management. This article sets out to explain these dramatic changes in governance power play and practice by examining the case of the extractive hot zone in Alberta, according to three distinct but interlinked trajectories in governance and CSR scholarship, namely the change from "government" to "governance", the emergence of a claimed post-political condition and the evolution of CSR practices towards stakeholder management.

Paper #4

Although an understanding of the empowerment of indigenous communities facing extractive industrial developments is emerging, most academic research still favours conventional conceptualizations of local indigenous communities as subject to circumstance and who are pushed even further to the fringes of their lands by external forces threatening to extinguish their traditional ways of life. However, this conventional understanding of industrial-indigenous relations does not explain recent developments in the indigenous Metis communities of northern Alberta. Several of these indigenous communities have mobilized a variety of resources to increase their leverage and expand their rights in the midst of the oil sands. Rather than being subject to circumstance, we argue that indigenous communities often seize the moment through strategic and pragmatic engagement with their ever-changing environments. By analyzing the current mobilization of resources among three indigenous Métis communities in the regional municipality of Wood Buffalo, Alberta, we developed an empirically grounded framework for understanding indigenous strategic pragmatism and the output, outcomes and impact of indigenous engagement with extractive industry developments.

List of interviews and encounters

Informal conversations Statoil Canada 2014 (24.04.14)

1. CSR director (Skype call)
2. CSR director, meetings in Bergen

Statoil Head office Oslo 2015 (09.01.15)

3. CSR advisor, team leader

Statoil Canada head office 2014 (03.06.14)

4. CSR director Statoil Canada
5. CSR advisor Statoil Canada
6. Communications officer Statoil Canada

Informal stakeholder gathering, Conklin, Statoil Canada 2014 (04.06.14)

7. Officer, Alberta Employment agency
8. Elder, Conklin Métis
9. Elder, Kikino Métis
10. Officer, Statoil Conklin

Formal semi-structured interviews 2015 (06.06.15 - 19.06.15)

11. CEO, McMurray Métis Office conversation
12. Consultant, McMurray Métis (Skype call)
13. Consultant, McMurray Métis
14. Government relations officer, McMurray Métis
15. Public officer, Wood Buffalo Regional Municipality
16. CEO Conklin resource development advisory committee
17. CEO Canada oil sands developers group
18. President Alberta Métis Nation
19. Vice President, Alberta Métis Nation
20. Consultant 1, Firelight
21. Consultant 2, Firelight
22. CSR director Statoil Canada
23. Academic scholar, University of Calgary
24. Academic scholar, University of Alberta
25. Head of Alberta Consultation Office

Meetings at McKay Métis head office 2015 (10.06.15)

26. Officer, informal conversation
27. Officer, informal conversation
28. Volunteer, McKay Métis
29. President McKay Métis, Office meeting, semi-structured interview and conversation
30. Vice president, McKay Métis. Conversation, expo-trip around the area

McMurray Métis campfire conversations 2015 (07.06.15 -15.06.15)

31. Vice President McMurray Métis,
32. Elder, male McMurray Métis
33. Elder, female, McMurray Métis
34. Consultant, McMurray Métis
35. Government relations officer, McMurray Métis
36. CEO McMurray Métis
37. Elder, male, McMurray Métis

Métis Crossing conversations 2015 (21.06.15)

38. President, Cold Lake Métis
39. Vice President, Alberta Métis Nation
40. Elder, McMurray Métis
41. Elder, Conklin Métis

Formal, semi-structured interviews 2016 (13.09.16 - 23.09.16)

42. CFO McKay Métis, home visit
43. Urban representative, Regional Municipality of Wood Buffalo city council, home visit
44. Rural representative, Regional Municipality of Wood Buffalo city council
45. CEO McMurray Métis office meeting
46. Government relations officer McMurray Métis, home visit
47. CEO Conklin resource development advisory committee
48. Aboriginal relations officer, CEMA, dinner meeting
49. Consultant, McMurray Métis, campfire conversation

McMurray Métis campfire conversations 2016 (13.09.16 - 15.09.16)

50. Vice President McMurray Métis
51. Elder, female McMurray Métis
52. Elder, male McMurray Métis
53. Elder, male McMurray Métis
54. President Fort Chipewyan Métis
55. Government relations officer McMurray Métis

McMurray trap line visit (campfire conversations) 2016 (22.09.16)

56. Elder, McMurray Métis
57. Elder, McMurray Métis
58. Elder, McMurray Métis
59. Consultant, McMurray Métis
60. Officer, McMurray Métis

UNIVERSITETET I BERGEN

Letter of introduction

To whom it may concern.

My name is Tarje I. Wanvik, and I am a PhD candidate at the Department of Geography, University of Bergen, Norway. My research field is **Governance** and **Corporate Social Responsibility (CSR)**, and I am currently exploring **global extractive hot zones**, looking at a Norwegian Oil Company, Statoil, operating in *Alberta*, *Canada*. My main focus is the governance regime of the Extractive zones of Canada, and corporate participation in this governance regime.

I realise that there has been extensive academic work within this field by the Canadian scholarship, but I am eager to produce some Norwegian examples / cases in order to

1) *Shed light on the evolution of what has become a specific example of a Canadian "**Contingent Governance**", involving the Provincial government, the Municipality of Wood Buffalo, the corporations (Statoil Canada in my case) and, to some extent, local "multi-stakeholder-initiatives". The contingency lies in the fact that the companies have gained a substantial operating role within this governance structure, rendering governance execution capacities and success dependent on corporate survival and profits*
2) *Understand how Statoil as a Norwegian company is adjusting to the Canadian regulatory environment and local expectations when it comes to CSR strategizing and implementation.*
3) *Investigate what kind of sustainability that rests within this Canadian governance model and social programming of this sort, focusing on the environmental, social and economic equity between companies and communities within extractive hot zones.*

I hope my research might contribute to understanding new governance innovations and new models of organising Corporate Social Responsibility programming. As part of my research, I would like to talk to you to discuss your experiences and knowledge in relation to these topics.

Yours sincerely

Tarje I. Wanvik, PhD candidate
Department of Geography
University of Bergen
tarje.wanvik@geog.uib.no

ATTACHMENT IV

Declaration of co-authorship

Råvaresonens geografi - steder som flerdimensjonale ansamlinger

Wanvik, Tarje and Haarstad, Håvard
Book chapter published in Berg et al. "Med sans for sted - nyere teorier"

The chapter is based on data collection conducted by Wanvik. Haarstad took the lead in literature review, while Wanvik was developing the theoretical argument and the empirical analysis.

Contribution (in % of total):
Wanvik 75 %
Haarstad 25 %

Date: 18/5 -2017

Sign:

Tarje I. Wanvik

Date: 18/5 - 2017

Sign:

Håvard Haarstad
Co-author and supervisor

ATTACHMENT V

Declaration of co-authorship

Carbonscapes and beyond - conceptualizing the instability of oil landscapes

Haarstad, Håvard and Wanvik, Tarje
Paper published in Progress in Human Geography, 2016

The paper is based on data collection conducted by Wanvik and Haarstad. Haarstad took the lead in literature review, while Wanvik was developing the theoretical argument. Haarstad and Wanvik collaborated on the empirical analysis and the application of the analytical framework.

Contribution (in % of total):
Haarstad 50 %
Wanvik 50 %

Date: 18/5 - 2017

Sign:

Håvard Haarstad

Date: 08.05.2017

Sign:

Tarje I. Wanvik
Co-author

ATTACHMENT VI

Declaration of co-authorship

Understanding Indigenous Strategic Pragmatism - Indigenous engagement with extractive industry developments in the Canadian North

Wanvik, Tarje and Caine, Ken
Published in Extractive Industries and Society, 2017

The paper is based on data collection conducted by Wanvik. Wanvik took the lead in literature review and in developing the theoretical argument, but benefited from significant feedback and input from Caine, particularly regarding grounding the paper in a proper Indigenous Canadian context.

Contribution (in % of total):
Wanvik 80 %
Caine 20 %

Date: 08.05.2017

Sign:

Tarje I. Wanvik

Date: 26.01.2017

Sign:

Ken Caine
Co-author