

Subsoil Mediations: Strategies of contention at the grassroots and the extraction of subsoil resources

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Elisabet Dueholm Rasch

Abstract

In this working paper, I argue that the ways in which communities engage in strategies of contention are mediated by what I call 'subsoil imaginaries': how peoples and communities imagine and give meaning to the subsoil and its extraction. In so doing, I approach the subsoil as a site on and through which strategies of contention gain form and content, and at the same time as a resource that is produced through such (political) discursive and practical activities. It is on this site that this paper explores strategies of contention as a negotiation of rights between political subjects and the state that is mediated by subsoil imaginaries. Strategies of contention are mediated by subsoil imaginations in two dimensions. First, conflicts and contestations over resource use are often rooted in different ideas and imaginaries of resource use and the subsoil. Natural resources can be valued as indigenous territory, as a part of livelihood, in terms of biodiversity, and as combinations thereof. Such meanings clash with the monetary valuations on which most extractive projects are based. Second, extractive projects cause conflicts over distribution, as well as over recognition and participation; it is not only about the environmental consequences of subsoil extraction but also (if not foremost) about power, democracy and citizenship. These claims of social justice, as I will show, are also shaped by imaginaries of the subsoil. The paper builds on research on resistance, citizenship and subsoil extraction since 2010 in Latin America, the Philippines and the Netherlands.

Zusammenfassung

In diesem Working Paper argumentiere ich, dass die Art und Weise, wie Gemeinschaften Strategien der Auseinandersetzung ausüben, durch das vermittelt werden, was ich als „Vorstellungen über den Untergrund“ bezeichne: Wie Bevölkerungsgruppen und Gemeinschaften sich den Untergrund und dessen Gewinnung vorstellen und diesen Bedeutung zuschreiben. Ich nähere mich dem Untergrund als einem Ort, an dem und durch den die Strategien der Auseinandersetzung Gestalt und Inhalt annehmen sowie gleichzeitig als Ressource, die durch solche (politischen) diskursiven und praktischen Aktivitäten produziert wird. Dabei untersucht dieser Artikel Strategien der Auseinandersetzung als eine Aushandlung von Rechten zwischen politischen Subjekten und dem Staat, welche durch Vorstellungen über den Untergrund vermittelt wird. Strategien der Auseinandersetzung werden auf zwei Arten durch Vorstellungen über den Untergrund vermittelt: Erstens sind Konflikte und Auseinandersetzungen um Ressourcen oft in unterschiedlichen Ideen und Vorstellungen von Ressourcennutzung und dem Untergrund verankert. Natürlichen Ressourcen können als indigenes Territorium, als Teil der Lebensgrundlage, in Bezug auf Biodiversität sowie als Kombination davon Bedeutungen zugeschrieben werden. Solche Bedeutungen stehen im Widerspruch zu den monetären Wertzuschreibungen, auf denen die meisten Rohstoffprojekte basieren. Zweitens verursachen Rohstoffprojekte Konflikte über

die Verteilung sowie über Anerkennung und Teilhabe. Dabei geht es nicht nur um die ökologischen Folgen der Untergrundgewinnung, sondern auch - wenn nicht sogar in erster Linie - um Macht, Demokratie und Staatsbürgerschaft. Diese Forderungen nach sozialer Gerechtigkeit werden, wie ich zeigen werde, auch durch Vorstellungen über den Untergrund geformt. Der Artikel stützt sich dabei auf Forschung zu Widerstand, Staatsbürgerschaft und Untergrundgewinnung in Lateinamerika, den Philippinen und den Niederlanden seit 2010.

Keywords: Subsoil extraction, knowledge, repertoires of contention, imaginaries

Schlagwörter: Untergrundgewinnung, Wissen, Strategien der Auseinandersetzung, Vorstellungen

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1 Introduction

Since the 1980s, the number of transnational companies that have entered local communities with the intention of commencing the large-scale extraction of subsoil resources (e.g. gas, metals) has increased enormously. In many cases, governments have granted concessions to such companies for exploration and/or exploitation without prior consultation of local populations, resulting in protests and activism. As they are excluded from decision-making processes, communities near and on proposed extraction sites start to question the democratic system itself. At the same time, the globalisation of rights and processes of decentralisation have created possibilities to organise against such large-scale development projects (Rasch 2012). Extraction of the underground is, therefore, an urgent theme, not only in social and environmental terms, but also analytically, as in many cases it constitutes the core of the relationship between development and democracy (Bebbington 2012). Involved communities have engaged in diverse strategies of contention to contest subsoil extraction, processes that in themselves are transformative. These strategies of contention include contained contention, which takes place within a regime and uses its established institutional routines, as well as transgressive contention, which challenges existing routines and crosses institutional boundaries (Tilly/Tarrow 2015), and they are often transformative in themselves as they produce new social configurations.

In this working paper, I argue that the ways in which communities engage in strategies of contention are mediated by what I call ‘subsoil imaginaries’: how peoples and communities imagine and give meaning to the subsoil and its extraction. In so doing, I approach the subsoil as a ‘resource environment’, as ‘the complex arrangements of physical stuff, extractive infrastructures, calculative devices, discourses of the market and development, the nation and the corporation, everyday practices, and so on, that allow those substances to exist as resources’ (Richardson/Weszkalnys 2014: 7). The subsoil then becomes a site on and through which strategies of contention gain form and content, and at the same time it is a resource that is produced through such (political) discursive and practical activities (Escobar 1999). Inspired by Mitchell’s (2009) seminal work ‘Carbon Democracy’, in which he demonstrates how the properties of coal and oil shape the (development of) democratic institutions, I explore strategies of contention as a negotiation of rights between political subjects and the state that is mediated by subsoil imaginaries.

The aim of this working paper is twofold and, I must say, partly personal. It is, on the one hand, an attempt to bring together the work that I have done on resistance, citizenship and subsoil extraction since 2010 in Latin America, the Philippines and the Netherlands. What these different struggles over natural resources had in common was that – in line with the literature – they were all rooted in different ideas and imaginaries of resource use (Muradian et al 2003, Damonte 2009, Rasch 2013). In these struggles, natural resources were valued as indigenous territory (Rasch 2012, Urkidi 2011), as a part of livelihood (Rasch/Köhne 2017, Rasch 2013), in terms of biodiversity (Rasch 2013), and as combinations thereof. Such meanings clashed with the monetary valuations on which most extractive projects are based (Martinez-Alier 2001). Another central point that came to the fore in all of my case studies is that extractive projects cause conflicts over distribution, as well as over recognition and participation (Martinez-Alier 2014); it is not only about the environmental consequences of subsoil extraction but also (if not foremost) about power, democracy and citizenship. I hope

to contribute to the rich literature on grassroots resistance to subsoil extraction by bringing these two main findings together and looking at how these processes of contention are mediated by subsoil imaginaries. This is the second, and more academic, aim of this working paper.

The strong opposition to subsoil extraction and other large-scale neoliberal development projects has received extensive academic attention. Research shows how communities have successfully applied legal instruments to reject extractive projects, mostly by using their right to Free Prior Informed Consent (see Yagenova/Garcia 2009, Costanza 2015, Dietz 2019, Fulmer et al 2008, among many others). Such forms of resistance are often successfully organised along different scales, from local to global (Urkidi 2011, Brysk 2000), and are framed along different lines of interest: as indigenous, ecological, anti-capitalist or anti-neoliberal (Rasch 2012, Borde/Rasch 2018). In some cases, like Guatemala, mining and other forms of extraction are considered new forms of colonisation and framed as an ‘invasion’ (Caxaj et al 2013, Salazar 2008). Although this exciting, rich scholarship discloses that what is at stake in these debates is not a technical solution to problems of water pollution or royalty rates, but questions of citizenship and power (Bebington/Bury 2009, Fulmer et al 2008, Rasch 2012), the ways in which imaginaries of resource properties mediate such processes of contention remain largely untouched.

So far, the growing literature on how the meanings of resources shape political processes has mostly focused on national politics, or on local perceptions of nature and resources, leaving aside how such views inform grassroots strategies of contention. Scholars have written about how different political regimes have facilitated the extraction of subsoil resources and the other way around (Mitchell 2009, Kaup 2008, Bakker/Bridge 2006, Perreault 2013). Mitchell (2009, 2011), for example, convincingly describes how the materiality of coal produced strong and powerful labour unions because of the way in which it was extracted and the dependency of societies on it. In a similar vein, the work of Kaup (2008) demonstrates how different actors in the Bolivian gas debate use the materiality of gas to challenge and stabilise regulation systems, both discursively and in practice.

This working paper is inspired by, and at the same time hopes to contribute to, these two strands of literature by focusing on how imaginaries of the subsoil mediate grassroots political participation and claim-making in socio-environmental conflicts regarding subsoil extraction. The subsoil is imagined in different, often opposing and competing, ways by different actors; ranging from tangible and controllable to mystic, living, dark and unknown. Such imaginaries, in turn, are always translated into what the subsoil can evolve into, like wealth, landslides, traffic and much more (Watts 2009). Following the likes of Perreault (2006) and Kaup (2008), I therefore explore ‘the nexus of the symbolic and the material’, while remaining grounded in ‘concrete locations’ (Biersack 2006: 17). In so doing, I use the idea of Taylor’s (2002) social imaginaries; imaginaries are shared by a large group, and refer to a group of people’s common understanding of their social surroundings, as well as the group’s common practices and shared legitimacy. Hence, not only does the underground become through interlinked political, economic, cultural and technoscientific practices and processes (Kinchy et al 2019), but grassroots strategies of contention are also mediated by subsoil imaginaries in a process of becoming.

I have conducted research on subsoil extraction as a political process since 2010. This started out as a research project about the wave of community consultations that Guatemala witnessed from 2006 onwards. Through these consultations, many communities spoke out against large-scale subsoil extraction. Two years later, I conducted a brief period of fieldwork in the Philippines, during which I investigated resistance towards open-pit mining on Palawan. From here on, my research has evolved in two different yet related directions. The first line of research follows the strategies of contention of defenders of the territory in Guatemala, and also examines how these defenders are criminalised and face human rights violations. The second line of research looks into resistance towards (shale) gas extraction, as well as renewable energy production, in the Netherlands. Most of the ideas that I present in this paper are (partly) based on, and rooted in, articles and chapters that have been published before in diverse journals and books about these case studies. I will therefore not refer to specific interviews and field notes all the time. For more specific elaborations of the case studies and ethnographic descriptions, I refer to the specific texts, which can be found in the bibliography. The different case studies will not be compared; they rather serve as a way of illustrating the general point I want to make, which has surfaced from bringing together these fields of study and combining them with insights from the literature.

This working paper now proceeds as follows. In the first section, I explore three main imaginaries of the subsoil that I encountered in my work in Latin America, the Netherlands and the Philippines: the subsoil as a controllable source of wealth, as dangerous and unknown, and as sacred. Whereas in the first two imaginaries the topsoil and subsoil are seen as separate, in the third narrative they are perceived as a whole and are inseparable from one another. In all three imaginaries, entering the subsoil is considered to have direct consequences, good or bad, for life on the topsoil. Then I go on to explore how imaginaries of the subsoil inform and at the same time become manifest in the strategies of contention in the domain of subsoil extraction. In so doing, I discuss two ways in which (meanings of) subsoil extraction produce new social configurations: 1) (new) alliances across scales and social groups that work together in the production and use of knowledge about (the consequences of) extraction, and 2) new strategies of contention, of which community consultations are the most important. These two forms of grassroots participation are not the only strategies that are part of the repertoires of contention in struggles over subsoil extraction, nor are they only applied or used in these domains. However, they evolve and transform in a process of becoming that is mediated by imaginaries of the subsoil.

2 Subsoil imaginaries

In this section, I explore the subsoil imaginaries that mediate, first, how actors position themselves towards subsoil extraction and, second, the strategies of contention that communities engage in, in order to contest subsoil extraction. The first subsoil imaginary that I examine is that of ‘the subsoil as resourceful and controllable’, an imaginary that is mostly voiced by governments and companies that favour subsoil extraction. After this I go on to discuss two subsoil imaginaries that produce negative stances towards subsoil extraction: the ‘unknown subsoil’ and ‘sacred Earth’.

2.1 The subsoil as resourceful and controllable

In line with a neoliberal mode of development, extractive industries and governments often imagine the subsoil as resourceful. Subsoil resources will, in this view, bring wealth and development; they are a way forward towards modernisation (Watts 2001, Rogers 2012). In line with a more general trend of ‘green mining’ (see, among others, Kirsch 2010), companies and governments often present (extracting) the underground as controllable and the consequences of extraction as repairable. Economic progress by way of extracting the subsoil is, then, considered compatible with environmental conservation (Rasch 2013). Central to this subsoil imaginary is the notion that the damages that occur under the ground can be fixed and repaired (Whitmore 2006). Companies emphasise the technological advances made in the infrastructural technologies that are used to extract subsoil resources (Rogers 2012). My work on Palawan (the Philippines) also shows how subsoil resources are considered a source of wealth in the pro-mining narrative and that damages done to the ecosystem are considered repairable through tree planting (Rasch 2013). This resonates with the way in which the Dutch government has presented shale gas resources as more sustainable than coal, and therefore a perfect transition fuel towards a renewable energy future (see Köhne/Rasch 2017, Metze 2017). In Guatemala, the national government views the subsoil mainly as a source of wealth, and its extraction as a way forward towards development.

The subsoil is thus imagined as controllable and manageable. In addition, the subsoil is considered transparent and ‘known’ because of advanced technologies that make complex extraction processes, such as hydraulic fracturing, possible (see, for example, Montgomery/Smith 2010). In addition, companies that are involved in subsoil extraction also claim to be transparent in their technologies. Cuadrilla, the drilling company that obtained concessions for shale gas explorations in the Netherlands, claimed to be open about their policies, the chemicals they use, and their extraction methods.¹ The company’s message at meetings convened to inform residents about possible shale gas developments would always be something like: ‘We only use two kinds of chemicals, and we use them in a closed system, so there is no danger there’. Possible risks are said to be covered through good monitoring, rules and transparency. This imaginary of the subsoil easily translates into imaginations of topsoil wealth and development (Watts 2009), and results in a positive stance towards the extraction of subsoil resources. Governmental policies and innovative technologies further facilitate this idea of the subsoil as controllable.

The imaginary of the subsoil as controllable and resourceful becomes manifest in, and at the same time is produced through, the politics of its extraction and the ways in which this process is governed through regulations. Such regulations are laid down in domestic mining and energy laws and are often embedded in a broader neoliberal vision of development. Many countries in the Global South adopted such neoliberal policies in the 1980s and 1990s, which were designed to encourage foreign investment, and in many cases, specifically to encourage investment in extractive industries (Bridge 2004, Ferguson 2006, Donnelly/Ford 2008), resonating with the idea of the subsoil as resourceful, a source of wealth. In some cases, the World Bank pushed states to court extractive industries as a key

¹ www.cuadrillaresources.com, last consulted on 3 June 2019.

vector within larger economic development plans (Holt-Gimenez 2007, Bebbington et al 2008). Hence, foreign capital was attracted to invest in complex technology. In Guatemala, for example, President Alvaro Arzu (1996–2000) signed a new mining bill as part of a much larger bundle of neoliberal policies, including the privatisation of telecommunications, the railroad and the energy sector, and a new investment law (Dougherty 2011). A similar process occurred in the Philippines. In 1995, the Philippine Mining Act was concluded, which made the unlimited extraction of natural resources by foreign parties possible, again echoing the perception of mining as a way forward, and of achieving upward development. Hence, extraction processes are facilitated by neoliberal policies that imagine the subsoil as both manageable and as a source of wealth.

Technological innovations further facilitate the idea of the subsoil as controllable and resourceful. Extraction of the subsoil is not easy. Its resources are fixed in place, and are therefore often ‘uncooperative’ (Bakker 2004). The material difficulties of the resources have to be ‘conquered’ (Kaup 2008); they need to be extracted and then transported. Technological innovations in gold extraction, such as cyanidation, carbon-in-pulp and new forms of electro winning, have made more diffuse and lower-grade gold deposits commercially viable. Actors with access to the capital necessary to control the physical and chemical properties of nature can turn such obstacles into opportunities for capital accumulation (Kaup 2008). This comes particularly to the fore in cases where extraction means the use of extremely aggressive methods that involve, among others, the use of chemicals and repetitious drilling, as is the case with hydraulic fracturing (used to extract shale and coal seam gas), as well as open pit mining. Fracking – which involves the high-pressure underground injection of large volumes of water and other fluids (including chemicals) into gas-bearing rock, to form fractures that are propped open with sand (Davis 2012) – has provided a major technological boost to industry efforts to obtain greater amounts of natural gas from within coal seams and shales.

2.2 Unknown subsoil, sacred Earth

Competing with the idea of the subsoil as controllable and a source of wealth is the imaginary of the underground as unknown and dark, inscribed with agency and possibly dangerous. In my work, I have encountered this imaginary in two related, but at the same time completely different, forms. What these two forms have in common is that they both result in a negative evaluation of subsoil extraction. Whereas the imaginary of the subsoil as controllable and resourceful is mostly (although not exclusively) present in the narratives of governments and companies, communities that live on or close to proposed extraction sites often imagine the subsoil as unknown and/or sacred. Both imaginaries become political and translate into powerful arguments against the extraction of subsoil resources. I will now briefly examine these two ways of imagining the subsoil as dangerous and unknown in contexts wherein communities turn against large-scale subsoil extraction, before I go on to discuss how contentious strategies evolve in the domain of subsoil resource extraction.

In the first version, the subsoil is imagined as uncontrollable and dangerous ‘because you don’t know what’s going on’, as residents who lived close to the proposed locations for shale gas drillings in Noordoostpolder, the Netherlands, would say. It is, in this imaginary,

considered dangerous to penetrate into the unknown subsoil, because it is not visible and therefore not possible to foresee what could possibly go wrong. This is especially the case in situations in which extraction makes use of new and unknown technologies that include the use of chemicals, such as hydraulic fracturing. In such cases, people might fear the pollution of groundwater. Visualisations of the subsoil often contain fearful images that depict the hydraulic fracturing process in the form of, for example, aggressive, fierce black animals. In addition, the ways in which these unknown extraction methods are presented by governments and extraction companies as 'secure', 'transparent' and 'controllable' are perceived as obscuring what can possibly go wrong. The risks and insecurities are thus not only rooted in the unknown features of the subsoil, but also in the unclear and non-transparent political process through which it is decided whether and how to extract subsoil resources.

'Not knowing' the subsoil in itself is not a reason to be against extraction, but it does generate fear regarding its extraction and produces a distrust of the politicians that are involved in the decision-making process and of the companies that are granted concessions for exploration and extraction, and which are perceived by the public as not being transparent at all about the extraction process. To make the subsoil more known and legible, the consequences of extracting it are translated into tangible imaginaries of the extraction process and how this process would become visible above the ground on websites, in information meetings and through PowerPoint presentations. I will discuss how this works in more detail in the section about producing knowledge as a strategy of contention. For now, what is important is that whereas in the first imaginary, topsoil consequences are imagined in terms of wealth, development and prosperity, in this second imaginary, the topsoil 'translation' contains numerous risks: a decrease in the value of real estate properties, trucks passing by every three minutes, earthquakes, drilling rigs, gas that comes from the water tap and can be set on fire. People fear noise, lights, increased traffic and transformed, industrialised landscapes. In the Noordoostpolder, citizen groups would not only talk in fearful ways of what could happen to the productive but vulnerable subsoil, but also made endless calculations of how many drilling rigs would be placed in the regular and structured landscape that they felt so attached to. Drilling and extraction always come with the fear of earthquakes and blow-outs, as opposed to the hope for wealth and development. Making the unknown subsoil legible involved creating fearful topsoil imaginaries and often resulted in a negative evaluation of subsoil extraction.

The second way of imagining the subsoil, which becomes political through a negative valuation of subsoil extraction, is often a part of an indigenous worldview and spirituality. In such worldviews, there is no separation between subsoil and topsoil – they are both perceived as a part of Earth – and people often ascribe agency to nature. Among the Maya peoples of Guatemala, for example, nature is perceived as 'the entire world, the work of God, everything marvelous and everything dangerous' (Blanchard 2010, p.2). Furthermore, the separation of nature and culture does not exist; it is a socio-natural world (de la Cadena 2015). In some countries in Latin America, such a view has been translated into the idea of *buen vivir* or *vivir bien* (living well), as a way of imagining other forms of development and ways of living that are closer to nature and inspired by the way of living in predominantly indigenous communities (see, among others, Acosta 2013, Martinez 2012). *Pacha Mama* or

Madre Tierra (Mother Earth), from where all life emerges (Acosta 2009, Gudynas 2011), is often at the centre of such imaginaries. Life, then, does not exclusively refer to human beings, but also includes flora and fauna, as well as spirits; all of these are interrelated and interdependent (Sieder/Barrero Vivero 2017). As such, a community is not conceived as separate from its location, but as part of it. Earth – bringing subsoil and topsoil together – is not only life-giving but also dangerous because of its powers. As Taussig noted after reading many ethnographic works about the Andes: ‘by feeding the mountain spirit, peasant producers also ensure that the mountain spirit will feed them’ (1980: 144).

Earth, then, is ascribed agency and is perceived as a living being. This imaginary of Earth also becomes manifest in what de la Cadena calls ‘earth beings’. As sources ‘of life and death, of wealth and misery’, earth beings and their surroundings become beings with which it is important to maintain proper relationships (de la Cadena 2010, 2015). In tune with such a worldview, mining has to be prevented, because otherwise sacred mountains or Mother Earth more generally could turn against human beings and ‘get mad’ (de la Cadena 2010, 2015, Valladares/Boelens 2019). Earthquakes and hurricanes are therefore perceived as punishments for not treating the subsoil with the respect that it deserves. In such ways of imagining the subsoil, direct references are made to the agency of *Pacha Mama* or *Madre Tierra*.

3 Subsoil mediations: strategies of contention

Subsoil resources are fixed in the place from which they have to be extracted. As such, companies and governments not only have to take into account the regulations that are linked to natural resources and overcome the technical problems of extraction; they also need to deal with the social implications of extraction (Kaup 2008). Subsoil imaginaries become political in the context of social regulations that prescribe the ways in which involved residents can(not) participate in decision-making processes regarding subsoil extraction. This produces new forms of mobilisation that mediate relations between the state and its citizens. In what follows, I explore two different strategies of contention around resource extraction that are mediated by imaginaries of the subsoil. But first, I briefly discuss how subsoil imaginaries become translated into powerful arguments against subsoil extraction.

3.1 Political becoming of the subsoil: claims and demands

The latter two imaginaries of the subsoil that were examined above not only provide powerful arguments against the extraction of subsoil resources, but are also translated into two main claims: first, the right to knowledge, and second, the (indigenous) right to sacred sites, land and identity. These two claims come together in one overarching demand for participation in decision-making processes regarding subsoil extraction.

The claim to knowledge is constructed from below and concerns both the right to know about the political process, as well as the right to know about the possible consequences of (planned) extraction processes. The right to know(ledge) is geared towards gaining control, but also towards being taken seriously as a partner in the process of decision-making and of

becoming part of the political process. As such, it is not only a claim, but also a strategy of contention. Claiming the right to knowledge becomes a process of engagement and of being able to make decisions. More about this follows in the next section.

The imaginary of the sacred subsoil becomes political through formulating sacredness as a right of its own, but also because it justifies claims of participation for indigenous people in decision-making processes related to the use of natural resources. Indigenous peoples often claim their right to be a part of decision-making processes, to decide upon what development is *as indigenous peoples* (Rasch 2012). They claim that the state should recognise their identity and rights as indigenous peoples in general, including their right to participate in decision-making processes about developments within indigenous territories.

Indigenous peoples can claim their right to sacred places and spirituality, as laid down in the ILO Convention (number 169) on Indigenous and Tribal Peoples (1989)² and the UN Declaration on the Rights of Indigenous Peoples (2007)³, but also through national legislation, though this obviously differs per country (Brysk 2000). In the Philippines, for example, indigenous rights are protected through the IPRA law, a piece of legislation that recognises indigenous rights and creates the possibility for claiming ancestral land domains. One important element of ancestral land domains is that they should have a sacred meaning to the population; this is a way for indigenous peoples to ‘prove’ that they are actually indigenous. Special references are made to the right to participate in the use, administration and conservation of the resources (Novellino 2000). The claiming of the sacred subsoil occurs in co-construction with the organisation of local consultations, which will be discussed in the final section.

The right to political participation in decision-making processes that concern subsoil extraction is informed and shaped through the claim to knowledge and the demand to be recognised as indigenous peoples. I am not suggesting that these are the only claims made in struggles over subsoil resources, because they are not; they exist alongside claims for a healthy environment, clean water, a safe living environment and many more. As more overarching issues, however, these claims are the ones through which imaginaries of the subsoil become manifest. Both the claim for knowledge, as well as the claim for indigeneity, build towards the right to participation as a strategy for claim-making. Through these claims, which at times are strategies in themselves (as we will see below) to influence the political process, the subsoil becomes political.

3.2 The production of knowledge about the unknown subsoil as a strategy of contention

As a strategy of contention, citizens engage in different acts of knowledge production, use and contestation. These acts of knowledge production can be transformative in themselves, as they engage different actors in grassroots participation, and at the same time provide the building blocks to organise broader support to oppose subsoil extraction, to lobby politicians (at the local and national levels) and to claim rights to (indigenous) territory. According to

² See https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

³ See <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>

Leach and Scoones (2007), the production and construction of knowledge is one of the key strategies of contemporary social movements. The unknown subsoil and the related (non-transparent) political processes, then, produce new social configurations, as people that live on or near sites for extraction develop different strategies for gaining control over the political process, as well as over knowledge production that concerns the consequences of subsoil extraction itself. As I will show below, people become engaged in political processes by way of producing knowledge. In addition, knowledge and the production of it are actively used to create awareness. The intention, then, is not only to get a grip on the possible consequences of extraction, but also to be recognised as a serious partner in decision-making processes *because* of being knowledgeable actors. In doing so, concerned citizens combine the four ways in which social movements can engage with science, which Epstein (1996) discerned as 1) disputing scientific claims, 2) seeking scientific authority for a political claim, 3) rejecting scientific ways of knowing, and 4) questioning the uses of, control over and content of science.

The first step in the production of knowledge is geared towards ‘getting to know’. This is often initiated by organisations outside of the involved community and entails, first, finding out what concessions for extraction are about (for what, which company, which territory, what it is) and what the possibilities are of organising against it. Hence, from the start, it is not only about the extraction and the subsoil itself, but also about the related political process. In Guatemala, NGOs from the capital or departmental main towns would start up a series of workshops and meetings to inform the population about the consequences of open-pit mining, and simultaneously about how to organise a consultation as a way of voicing their standpoint towards a new mining project (Rasch 2012). In the Noordoostpolder, people from the Dutch branch of Friends of the Earth would come and inform the population mainly about the concessions and about what hydraulic fracturing entails. Sometimes, however, this form of knowledge is considered to be partial. In such cases, people often start engaging in a process of knowledge production by themselves (Rasch/Köhne 2016).

After this first period of ‘getting to know’ the process and the possible, more general consequences of subsoil extraction, communities often start engaging in different activities of knowledge construction in collaboration with different actors, as a way of contesting the plans for subsoil extraction. One focus is the precise mapping of the concessions. This often happens in collaboration with (inter)national NGOs (Peluso 1995, Rasch 2012). It is about finding out whether mining concessions might overlap with the borders of, for example, Ancestral Land Domain or environmentally protected territories, as happened in Palawan. Here, departmental and local actors were jointly involved in mapping ancestral land claims as a way of building content for litigation. This process is also called counter-mapping and might provide powerful building blocks for resisting extraction developments. Counter-mapping makes the territory more legible (Peluso 1995), and is by no means a strategy that is only used in relation to subsoil resource extraction (see for example Willow 2013). Through participatory mapping, actors produce alternative representations of spatial knowledge to contest the legal basis of the state's spatial politics (Peluso 1995). The subsoil becomes more tangible and legible, and at the same time new sources of information and knowledge are used to contest the legitimacy and support of concessions. The production of

knowledge through counter-mapping is transformative, because it involves the participation of individuals and organisations at local, regional and national levels.

Another type of knowledge that is produced is extensive knowledge about the extraction process itself and the consequences it may have. This is best understood as a way of getting a grip on the risky, unknown, insecure process that will take place under the ground. Citizen groups often engage in different forms of knowledge production, finding out about chemicals, the extraction process, the risks for health and water pollution involved, among many other things. They read reports and scientific articles, make calculations, and develop models and visualisations that depict the topsoil consequences of subsoil extraction. In doing so, citizen groups emphasise that the knowledge they present is objective and neutral. This also came to the fore in our work in the Noordoostpolder, where citizen groups in the end hired a well-known consultancy agency to conduct research in order to ‘prove’ in a serious way how damaging fracking the subsoil would be for the Noordoostpolder and especially for the local economy (Rasch/Köhne 2017). As such, it was also a way of seeking scientific authority for their own political claims (Epstein 1996).

Mapping practices often result in, yes, maps, on which overlapping concessions and ancestral land claims and protected areas, for example, are clearly demarcated. Knowledge about the consequences of subsoil extraction is also translated into more tangible, topsoil images. In the Noordoostpolder, for example, a lot of work went into comparing the height of drilling rigs with the height of the Polder Toren (the former water tower in the main town, Emmeloord, height: 65 metres) in visual simulations of what the transformed landscape would look like. The citizen groups preferred to present their knowledge about the possible consequences of hydraulic fracturing through models, numbers, diagrams and PowerPoint presentations. These ‘knowledge building blocks’ were, in the case of the Noordoostpolder, important to be able to claim a voice in, but also to produce new forms of, political grassroots participation. Seeking scientific authority for political claims, in addition, became important in the lobbying activities with national politicians. In this process, people operated within the system, but also used the system to push its boundaries. Producing knowledge is therefore both a contained and a transgressive strategy of contention at the same time.

3.3 Community consultations as contained and transgressive strategies of contention

Legislation and regulations that aim to organise social participation in decision-making processes related to subsoil extraction produce new social configurations at the grassroots level. One way of organising such social participation are community consultations. Especially in Latin America, community consultations have been, and still are, an important way for communities to (successfully) express their voice against subsoil extraction. Communities have successfully applied legal instruments to reject extractive projects, mostly by using their right to Free Prior Informed Consent (Yagenova/Garcia 2009, Costanza 2015, Laplante/Nolin 2014, Fulmer et al 2008, Urkidi 2015). Through these community consultations, indigenous people have claimed their indigenous rights, a process through which the narrative of sacred subsoil, including indigenous rights, has been instrumental (Humphreys 2017, Pulido 1998). However, community consultations have also

been organised in non-indigenous territories as a way of creating a solid base for negotiating with politicians. Community consultations are likely to become organised in cases of planned subsoil extraction (though I am not suggesting that community consultations only take place in the domain of subsoil extraction) because of the fixed place of subsoil resources: extracting them always involves dealing with the populations living near or on the proposed extraction sites.

How participation and social endorsement is regulated, and along which scales they are organised, differ from place to place (Urkidi 2011, Brysk 2000, Martinez-Alier 2014). Consultations often mobilise people along different scales – from local to global – and create unexpected alliances at the municipal and community levels. This works in different ways. In cases where consultations are arranged by governments and companies, people often do not trust the intentions or the outcomes of the consultations, which can spur new social mobilisations (see for example Perreault 2015). This also occurred on Palawan, where inhabitants actively contested the outcomes of the social endorsement procedures (Rasch 2013). In cases where no consultations are organised at all, people might claim their right to consultation and organise consultations by themselves. In both cases, a claim of social justice is added to demands that are made, rooted in the experience of exclusion. Through organising community consultations, communities first and foremost claim the right to decide. What the different types of consultation have in common is that the community can make its voice known, though it is nevertheless the national government that ultimately decides on how to incorporate the voice of the community in its final decision (Rasch 2012). Community consultations might be framed as a right to be consulted according to local uses and customs. Article 15 of the ILO Convention (number 169) on Indigenous and Tribal Peoples, for example, defines that in the case that subsoil resources are the property of the state, the state is still obliged to consult the people that inhabit the territories before conferring licenses for exploration and exploitation to third parties (Yagenova/Garcia 2009, Costanza 2015). In Guatemala, more than 80 municipalities organised community consultations, backed up by organisations, academics, activists and NGOs, and declared themselves mining-free as a reaction to these developments (Yagenova/Garcia 2009). Indigenous activists, lawyers and community leaders resorted to the courts to claim their citizenship rights, combining international agreements, national legislation and indigenous law. In most cases (though not all), these consultations were framed as indigenous, as Maya. In their struggle against subsoil extraction, the involved actors referred to the indigenous right to participation as laid down in the ILO Convention 169, in the UN Convention on the Rights of Indigenous Peoples, and in the Guatemalan Peace Accord (1996)⁴ with its focus on indigenous rights. Community consultations are often organised according to local uses and customs, and place indigenous rights and identity at the centre of their claims to participation in subsoil decision-making. The subsoil-as-sacred discourse often becomes instrumental in this process, as this ‘proves’ indigeneity.

Community consultations do not only take place in indigenous territories. In the Dutch Noordoostpolder, new alliances have formed that actively resist hydraulic fracturing. When it was first known that there were two concessions that included the Noordoostpolder, a first

⁴ See https://www.gt.undp.org/content/dam/guatemala/docs/publications/undp_gt_Acuerdos-de-Paz-O.pdf

activist group was organised with the help of the Dutch branch of Friends of the Earth. They successfully put the Noordoostpolder in the spotlight and succeeded in working together with the local municipal council. The municipal council became involved in civil organising and contributed indirectly to the creation of '*Tegengas, a Polderbreed Partnerschap tegen Schaliegas*' (Polder-Wide Partnership Against Shale Gas). *Tegengas* represented both local business interests and inhabitants to express neutrality. Two citizen groups were also part of the partnership. The production and dissemination of 'objective' and 'neutral' knowledge became central to anti-shale gas activities. Knowledge was primarily disseminated through a mix of information and consultation evenings in the villages, often in collaboration with village councils. These consultations were not organised as part of regulated participation processes from below, but rather, by way of organising these consultation processes, *Tegengas* claimed a voice in the decision-making process by making its own procedures. The basic idea was that if people would know 'the truth' about shale gas, they would also oppose it. After each meeting, the villages would vote in favour or against shale gas. By way of these information meetings, *Tegengas* gradually built up awareness and support among Noordoostpolder residents, and created a strong base for making the argument that the whole polder was against shale gas developments. Hence, in this case, the knowledge claim discussed above informed the organisation of community consultations.

Companies and governments often short-cut (Bebbington et al 2008) these new forms of grassroots political participation, such as community consultations, which arise as a product of the social regulation of subsoil extraction. The political distrust that arises from these processes can be an important accelerator of socio-environmental conflicts (Muradian et al 2003, Rasch/Köhne 2016). Related to this, trust in political institutions and democracy is further hampered by the increase in the use of penal law and anti-terrorist legislation to obstruct social mobilisation (Terwindt 2014); declaring a state of emergency to justify the detention of activists, for instance (Terwindt 2014, Rasch 2017). Criminalisation has focused on activists involved in resistance against massive-scale resource extraction. This has produced a polarised situation in Guatemala, for instance, in which the populations do not formulate their claims in terms of inclusion in the Guatemalan state, but in terms of the defence of their own territories (Rasch 2017). Besides this, many activists suffer from multiple forms of intimidation and human rights violations (Iturralde 2010, Caxaj et al 2013), including threats, injuries and killings committed with impunity, and an overall lack of protection.

4 Final reflections

Subsoil imaginaries do not only constitute people's common understandings of the subsoil, but also open up avenues for comprehending their common (political) practices as part of these imaginaries. In this working paper, I have explored how subsoil imaginaries mediate contained and transgressive grassroots strategies of contention (Tilly/Tarrow 2015) in the domain of subsoil extraction.

The first subsoil imaginary that I examined was 'the subsoil as resourceful and controllable'. This is an imaginary that is mostly voiced by governments and companies that favour subsoil extraction. Oftentimes, this subsoil imaginary is part of a broader set of neoliberal

(development) policies. Such policies not only regulate concessions for exploration and exploitation, but also manage the ways in which people and communities can participate in decision-making processes regarding subsoil extraction. Decision-making processes in this realm are generally very centralised, with little space for grassroots participation. As a result, subsoil extraction in most cases (and in every case that I studied) involves processes of exclusion.

This imaginary of the subsoil competes with two main other subsoil imaginaries that produce negative stances towards subsoil extraction: the ‘unknown subsoil’ and ‘sacred Earth’. Within the imaginary of the unknown subsoil, the underground is dark, unpredictable, not-legible. People fear the damage that subsoil extraction will cause. The unknown subsoil easily evolves into imaginaries of the topsoil full of drilling rigs, continuous transport, destroyed landscapes. This imaginary is often a result of too little information about the extraction process, combined with non-transparent political processes. Although the unknown subsoil does not automatically result in a negative stance towards extraction, it causes insecurity and distrust of the political process. It also informs the production of knowledge as a strategy of contention; citizen groups produce knowledge not only in order to actually get to know more about the extraction process, but to be recognised as a partner in decision-making processes.

The other subsoil imaginary that competes with the idea of the subsoil as a source of wealth is the subsoil as sacred Earth. Within this imaginary, subsoil and topsoil are not separated, but one. Earth is inscribed with agency, and not taking good care of its natural resources can result in landslides and earthquakes, among other disastrous natural phenomena. This subsoil imaginary is often part of an indigenous worldview and results in a stance against subsoil extraction. The demand for sacred lands and indigeneity is informed by this argument against subsoil extraction. The claim for indigenous rights is nested within a broader claim for participation in decision-making processes. Community consultations constitute an important element in this, in which the demand for indigenous rights and participation is enacted and claimed at the same time.

The three subsoil imaginaries examined in this working paper therefore all become political in different dimensions that partly build on each other. The ‘subsoil as resourceful’ becomes political as part of neoliberal policies that facilitate subsoil extraction, but which also regulate social grassroots participation in extraction processes. These politics of extraction of the subsoil on the national and international levels evoke reactions from communities that live on or near (proposed) extraction sites and who imagine the subsoil in quite other ways. The ‘subsoil as unknown’, as well as the ‘subsoil as sacred Earth’, both translate into powerful arguments against subsoil extraction. The subsequent struggles against such developments produce new social configurations and are therefore transformative in themselves. These arguments also inform the main claims that are voiced through the struggle against subsoil extraction: the right to know and several indigenous rights. These two demands both lead to one broader claim: the right to participation. These demands become manifest in, and are enacted through, the production of knowledge and the realisation of community consultations. In addition, both strategies of contention bring different people and groups together in new participatory processes, and as such produce new social configurations.

In sum, subsoil imaginations mediate strategies of contention in conflicts over subsoil extraction in a myriad of non-linear ways. The subsoil is at the core of the relation between democracy and development (Bebbington 2012). It is, however, not only the properties of subsoil resources that shape political processes such as resistance (Kaup 2008) and labour unions (Mitchell 2009); the ways in which the subsoil are imagined and narrated also shape how people give form and content to the claims they make through their strategies of contention (Tilly/Tarrow 2015), and as such how they become part of, and manifest in, these strategies. Strategies of contention, in turn, are often transformative in themselves, as they produce new social configurations. The underground ‘becomes’ not only through interlinked political, economic, cultural and technoscientific practices and processes (Kinchy et al 2019), but also via subsoil imaginations that mediate grassroots strategies of contention.

References

- Acosta, Alberto (2009): *El buen vivir: una vía para el desarrollo*, Quito: Abya-Yala.
- Bakker, Karen (2004): *An Uncooperative Commodity: Privatizing Water in England and Wales*, New York: Oxford University Press.
- Bakker, Karen/Bridge, Gavin (2006): Material Worlds? Resource Geographies and the Matter of Nature, in: *Progress in Human Geography*, 30:1, 5-27.
- Bebbington, Anthony (2012): Underground political ecologies: the second annual lecture of the Cultural and Political Ecology Specialty Group of the Association of American Geographers. *Geoforum*, 43:6, 1152-1162.
- Bebbington, Anthony/Bury, Jeffrey (2009): Institutional Challenges for Mining and Sustainability in Peru, in: *Proceedings of the National Academy of Sciences*, 106:41, 17296-17301.
- Bebbington, Anthony/ Hinojosa, Leonith/ Bebbington, Denise Humphreys/Burneo, Maria Luisa/Warnaars, Ximena (2008): Contention and Ambiguity: Mining and the Possibilities of Development, in: *Development and Change*, 39:6, 887-914.
- Bebbington, Anthony/Bebbington, Denise Humphreys/Bury, Jeffrey/Lingan, Jeannet/Muñoz, Juan Pablo/Scurrah, Martin (2008): Mining and Social Movements: Struggles over Livelihood and Rural Territorial Development in the Andes, in: *World Development*, 36:12, 2888-2905.
- Biersack, Aletta (2006) Reimagining Political Ecology: Culture/Power/History/Nature, in: Biersack, Aletta/Greensberg, James (eds) *Reimagining Political Ecology*, Durham/London: Duke University Press, 3-40.
- Blanchard, Katie (2010). *Maya in the Mountains: Ecology and Cosmology in The Rocks and Caves of Highland, Guatemala*, URL: https://apps.carleton.edu/curricular/ocs/guatemala/assets/Blanchard_2010.pdf, last accessed 9 June 2019.
- Borde, Radhika/Rasch, Elisabet Dueholm (2018) Internationalized Framing in Social Movements against Mining in India and the Philippines, in: *Journal of Developing Societies*, 34:2, 195-218.
- Bridge, Gavin (2004): Editorial: Gas, and How to Get It, in: *Geoforum*, 35:, 395–97.
- Brysk, Alison (2000): *From Tribal Village to Global Village: Indian rights and International Relations in Latin America*, Stanford: Stanford University Press.
- Caxaj, C. S./Berman, H./Restoule, J. P./Varcoe, C./Ray, S. L. (2013). Promises of peace and development: Mining and violence in Guatemala. *Advances in Nursing Science*, 363, 213-228.
- Costanza, Jennifer Noel (2015): Indigenous Peoples' Right to Prior Consultation: Transforming Human Rights from the Grassroots in Guatemala, in: *Journal of Human Rights*, 14:2, 260-285.
- Costanza, Jennifer Noel (2016): Mining Conflict and the Politics of Obtaining a Social License: Insight from Guatemala, in: *World Development*, 79, 97-113.

- Cremers, Gijss/ Rasch, Elisabet Dueholm (2016): 'El dios dinero es el que manda'. Nature as a Field of Force in the Western Highlands of Guatemala, in: *Forum for Inter-American Research*, 9:2, 72-93.
- Damonte, Gerardo (2009): Territorialidades y territorios en comunidades aymaras en Perú y Bolivia, in: *Argumentos*, 3, 1-7, URL: <http://red.pucp.edu.pe/ridei/wp-content/uploads/biblioteca/0902101.pdf>, last accessed 21 July 2019.
- Davis, C. (2012): The politics of "fracking": Regulating natural gas drilling practices in Colorado and Texas. *Review of Policy Research*, 29:2, 177-191.
- De la Cadena, Marisol (2015): *Earth Beings: Ecologies of Practice across Andean Worlds*, Durham/London: Duke University Press.
- De la Cadena, Marisol (2010): Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond "Politics", in: *Cultural Anthropology*, 25:2, 334-370.
- Dietz, Kristina (2019): Direct Democracy in Mining Conflicts in Latin America: Mobilising against the La Colosa Project in Colombia, in: *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 40:2, 145-162.
- Donnelly, Roger/Ford, Benjamin (2008): Into Africa: How the Resource Boom is Making SubSaharan Africa More Important to Australia, Lowy Institute Paper 24, Sydney: Lowy Institute for International Policy.
- Dougherty, Michael (2011): The Global Gold Mining Industry, Junior Firms, and Civil Society Resistance in Guatemala, in: *Bulletin of Latin American Research*, 30:4, 403-418.
- Epstein, Steven (1996): *Impure Science: AIDS, Activism, and the Politics of Knowledge*, Berkeley/Los Angeles/London: University of California Press.
- Escobar, Arturo (1999): After Nature: Steps to an Antiessentialist Political Ecology, in: *Current Anthropology*, 40:1, 1-30.
- Ferguson, James (2006): *Global Shadows: Africa in the Neoliberal World Order*. Durham/London: Duke University Press, 2006.
- Fulmer, Amanda/ Snodgrass Godoy, Angelina/Neff, Philip (2008): Indigenous Rights, Resistance, and the Law: Lessons from a Guatemalan Mine, in: *Latin American Politics and Society*, 50:4, 91-121.
- Gudynas, Eduardo (2011): Los derechos de la naturaleza en serio, in: Acosta, Alberto/Martínez, Esperanza (eds.) *La naturaleza con derechos: de la filosofía a la política*, Quito: Abya-Yala, 239-286
- Holt-Gimenez, Eric (2007): La reestructuración territorial y las bases de la reforma agraria: comunidades indígenas, minería aurífera, y el Banco Mundial, in: Bebbington, Anthony (ed.) *Minería, movimientos sociales y respuestas campesinas: una ecología política de transformaciones territoriales*, Lima: Instituto de Estudios Peruanos, 81-113.
- Humphreys, Denise (2017): Rights of Pachamama: The Emergence of an Earth Jurisprudence in the Americas, in: *Journal of International Relations and Development*, 20:3, 459-484.

- Iturralde, M. (2010): Democracies without citizenship: Crime and punishment in Latin America. *New Criminal Law Review: In International and Interdisciplinary Journal*, 13:2, 309-332.
- Kaup, Brent Z. (2008): Negotiating through Nature: The Resistant Materiality and Materiality of Resistance in Bolivia's Natural Gas Sector, in: *Geoforum*, 39:5, 1734-1742.
- Kirsch, Stuart (2010): Sustainable Mining, in: *Dialectical Anthropology*, 34:1, 87-93.
- Köhne, Michiel/Rasch, Elisabet Dueholm (2018): Belonging to and in the Shale Gas Fields. A Case-Study of the Noordoostpolder, the Netherlands, in: *Sociologia Ruralis*, 58:3, 604-624.
- Kinchy, A. J./Phadke, R./Smith, J. M. (2018): Engaging the underground: An STS field in formation. *Engaging Science, Technology, and Society*, 4, 22-42.
- Laplante, J. P./Nolin, C. (2014): Consultas and socially responsible investing in Guatemala: a case study examining Maya perspectives on the indigenous right to free, prior, and informed consent. *Society & Natural Resources*, 27:3, 231-248.
- Leach, Melissa/Scoones, Ian (2007): Mobilising Citizens: Social Movements and the Politics of Knowledge, IDS Working Paper 276, URL: <https://opendocs.ids.ac.uk/opendocs/handle/123456789/4030>, last accessed 10 June 2019.
- Martínez, Esperanza (2012) Pachamama y Sumak Kawsai, in *Recuperado el*, 5:06, URL <http://comitesromero.org/sicsal/reflexiones/CentenarioProanhoEMartinez.pdf>, last accessed 9 June 2019.
- Martinez-Alier, Joan (2003): *The Environmentalism of the Poor: a Study of Ecological Conflicts and Valuation*. Cheltenham UK/Northampton MA USA: Edward Elgar Publishing.
- Martinez-Alier, Joan (2001): Mining Conflicts, Environmental Justice, and Valuation, in: *Journal of Hazardous Materials*, 86:1-3, 153-170.
- Martinez-Alier, Joan (2014): The Environmentalism of the Poor, in: *Geoforum*, 54 (July 2014), 239-241.
- Metze, Tamara (2017): Fracking the Debate: Frame Shifts and Boundary Work in Dutch Decision Making on Shale Gas, in: *Journal of Environmental Policy & Planning*, 19:1, 35-52.
- Mitchell, Timothy (2009): Carbon Democracy, in: *Economy and Society*, 38:3, 399-432.
- Mitchell, Timothy (2011): *Carbon Democracy: Political power in the Age of Oil*. London/New York: Verso Books.
- Montgomery, Carl T./ Smith, Michael (2010): Hydraulic Fracturing: History of an Enduring Technology, in: *Journal of Petroleum Technology*, 62:12, 26-40.
- Muradian, Roldan/ Martinez-Alier, Joan/Correa, Humberto (2003): International Capital versus Local Population: The Environmental Conflict of the Tambogrande Mining Project, Peru, in: *Society & Natural Resources*, 16:9,775-792.

- Novellino, Dario (2000): Recognition of Ancestral Domain Claims on Palawan Island, the Philippines: Is There a Future, in: *Land Reform: Land Settlement and Cooperatives*, 1, 56-72.
- Peluso, Nancy Lee (1995) Whose Woods Are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia, in: *Antipode*, 27:4, 383-406.
- Perreault, Thomas (2006): From the Guerra Del Agua to the Guerra Del Gas: Resource Governance, Neoliberalism and Popular Protest in Bolivia, in: *Antipode*, 38:1,150-172.
- Perreault, Thomas (2013): Dispossession by Accumulation? Mining, Water and the Nature of Enclosure on the Bolivian Altiplano, in: *Antipode*, 45:5, 1050-1069.
- Perreault, Thomas (2015): Performing Participation: Mining, Power, and the Limits of Public Consultation in Bolivia, in: *The Journal of Latin American and Caribbean Anthropology*, 20:3, 433-451.
- Pulido, Laura (1998): The Sacredness of “Mother Earth”: Spirituality, Activism, and Social Justice, in: *Annals of the Association of American Geographers*, 88:4, 719-723.
- Rasch, Elisabet Dueholm (2012) Transformations in Citizenship: Local Resistance Against Mining Projects in Huehuetenango (Guatemala), in: *Journal of Developing Societies*, 28:2, 159-184.
- Rasch, Elisabet Dueholm (2013) “Ecotourism, Not Mining in Palawan!” Territorial Narratives on the Last Frontier (Palawan, the Philippines) in Büscher, Bram/ Davidov, Veronica (eds.) *Rural Livelihoods and the Ecotourism/Extraction Nexus*, London/New York: Routledge, 236–54.
- Rasch, Elisabet Dueholm/Köhne, Michiel (2016): Hydraulic Fracturing, Energy Transition and Political Engagement in the Netherlands: The Energetics of Citizenship, in: *Energy Research & Social Science*, 13 (March 2016), 106-115.
- Rasch, Elisabet Dueholm/Köhne, Michiel (2016) Micropolitics in Resistance: The Micropolitics of Large-Scale Natural Resource Extraction in South East Asia, in: *Society & Natural Resources*, 29:4, 479-492.
- Rasch, Elisabet Dueholm/Köhne, Michiel (2017) Practices and Imaginations of Energy Justice in Transition. A Case Study of the Noordoostpolder, the Netherlands, in: *Energy Policy*, 107 (March 2017), 607-614.
- Richardson, Tanya/Weszkalnys, Gisa (2014): Introduction: Resource Materialities, in: *Anthropological Quarterly*, 87:1, 5-30.
- Rogers, Douglas (2012): The Materiality of the Corporation: Oil, Gas, and Corporate Social Technologies in the Remaking of a Russian Region, in: *American Ethnologist*, 39:2, 284-296.
- Rogers, Douglas (2015) Oil and Anthropology, in: *Annual Review of Anthropology*, 44, 365-380.
- Salazar, Eglá Martínez (2008) State Terror and Violence as a Process of Lifelong Teaching–Learning: the Case of Guatemala, in: *International Journal of Lifelong Education*, 27:2, 201-216.

- Sieder, Rachel/Barrera Vivero, Anna (2017): Legalizing Indigenous Self-Determination: Autonomy and Buen Vivir in Latin America, in: *The Journal of Latin American and Caribbean Anthropology*, 22:1, 9-26.
- Taylor, Charles (2002): Modern Social Imaginaries, in: *Public Culture*, 14:1, 91-124.
- Taussig, Michael (1980): *The Devil and Commodity Fetishism in South America*, Chapel Hill: University of North Carolina Press.
- Terwindt, C. (2014): Protesters as terrorists?. *Crime, Law and Social Change*, 62(3), 207-234.
- Tilly, Charles/Tarrow, Sidney (2015): *Contentious Politics (second edition)*. New York: Oxford University Press.
- Urkidi, Leire (2011): The Defence of Community in the Anti-Mining Movement of Guatemala, in: *Journal of Agrarian Change*, 11:4, 556-580.
- Urkidi, Leire/Walter, Mariana (2011) Dimensions of Environmental Justice in Anti-Gold Mining Movements in Latin America, in: *Geoforum*, 42:6, 683-695.
- Valladares, Carolina/Boelens, Rutgerd (2019): Mining for Mother Earth. Governmentalities, Sacred Waters and Nature's Rights in Ecuador, in: *Geoforum*, 100 , 68-79.
- Velásquez, Teresa A. (2018): Tracing the Political Life of Kimsacocha: Conflicts over Water and Mining in Ecuador's Southern Andes, in: *Latin American Perspectives*, 45:5, 154-169.
- Walter, Mariana/Leire Urkidi (2017): Community Mining Consultations in Latin America (2002–2012): The Contested Emergence of a Hybrid Institution for Participation, in: *Geoforum*, 84 , 265-279.
- Watts, Michael (2001): Petro-Violence: Community, Extraction, and Political Ecology of a Mythic Commodity, in: Peluso, Nancy/Watts, Michael (eds.) *Violent Environments*, Ithaca/London: Cornell University Press, 189-212.
- Watts, Michael (2009): Oil, Development, and the Politics of the Bottom Billion, in: *Macalester International*, 24:1, 79-130.
- Whitmore, Andy. (2006): The Emperors New Clothes: Sustainable Mining? In: *Journal of Cleaner Production*, 14:3,4, 309-314.
- Willow, Anna J. (2013): Doing Sovereignty in Native North America: Anishinaabe Counter-Mapping and the Struggle for Land-Based Self-Determination, in: *Human Ecology*, 41:6, 871-884.
- Yagenova, S. V., & Garcia, R. (2009): Indigenous people's struggles against transnational mining companies in Guatemala: The Sipakapa People vs Goldcorp Mining Company. *Socialism and Democracy*, 23:3, 157-166.

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