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Is ‘activist’ a dirty word?

Place identity, activism and unconventional gas development across three continents

Abstract: Communities respond to unconventional gas in a variety of ways. In some communities, industry has held a social license, while in other areas, industrial development has been slowed, halted, or prevented by social resistance. Repeatedly, across multiple nations and communities, we have observed that social identities that either incorporate or eschew activism intersect with perceptions of this development’s effect on place identity to either foster or discourage opposition. Particularly interesting are cases in which fracking is perceived to threaten local place identity, but where activism conflicts with social identity. To mobilise different sectors of the population, it often appears important for local residents to be perceived as ‘regular citizens’ and not as activists. We explore how intersection of social identities and place identity shaped the different ways in which communities in Australia, Canada, the Netherlands, and the United States have responded to unconventional gas development. Communities resisting development often see ‘activism’ as something that ‘outsiders’ do and that must be rejected as insufficiently objective and neutral. This view of activism and activists produces specific forms of resistance that differ from typical ‘activist’ actions, in which ‘knowledge’, ‘information’, neutrality, and objectivity are particularly important.

Keywords: Shale gas, coal seam gas, fracking, activism, social identity, place identity

Introduction

A global boom in the exploration and exploitation of unconventional gas resources, such as shale gas and coal seam gas, has taken place over the last decade. Unconventional gas exploitation is set apart from ‘conventional’ resource extraction due to a frequent reliance on the hydraulic fracturing process to stimulate shale and coal strata to release methane gas. The hydraulic fracturing process has become central to community concerns around risks and threats of unconventional gas development, frequently referred to as ‘fracking’ (Evensen et al., 2014). Across different regions, pace and scale of development has varied immensely due to a wide range of factors, including: (1) physical considerations such as the scale and quality of deposits, (2) economic considerations such as national and international market value and the distance to the market, (3) social considerations such as changes in local communities due to development, and (4) potential emergence of social resistance against ‘fracking’ industries (Evensen and Stedman, 2016; Luke, 2017; Luke & Evensen, 2018; Malin, 2016; Perry, 2012; Rasch & Köhne, 2016; Towler et al., 2016; Willow & Wylie, 2014; Willow et al., 2014).

Unconventional gas development often encounters resistance from communities near to proposed or existing extraction sites due to concerns regarding impacts on the lived environment in terms of drinking water for livestock and humans, traffic, noise, landscape pollution, and health (Hudgins and Poole, 2014; Jacquet, 2014; Perry, 2011; Rasch & Köhne, 2016; Uhlmann et al., 2014). In some areas, the shale or coal seam gas industry has been considered broadly to hold a ‘social license’ at the community level, while in other areas, industrial development has been slowed and impacted by various expressions of social resistance (e.g., Bradshaw & Waite, 2017; Brändle et al., 2016; Luke, 2017).

A range of motivating factors for social resistance have been identified, with procedural injustice being a crucial driver, however, environmental values are also frequently linked to activism of an environmental nature (Muradian, Martinez-Alier & Correa 2003; Butler & Adamowski 2015; Luke 2017). While there have been a range of studies which have explored motivations for participation in social resistance (e.g. Freeman, 1975; Klar & Kasser 2009), our principle focus on is the extent to which residents choose to resist or accept gas industry developments, and whether they do, or do not participate in overt activism.

Previous research suggests that social identity can have an important influence on how resistance may take place (Makki, 2015, Lloyd et al., 2013). Although such studies provide important insights about group involvement in relation to resisting resource extraction, they also raise questions about how such place based forms of extraction relate to place identity. This paper compares international case studies in Australia, Canada, the Netherlands, and the United States to explore how social responses to unconventional gas developments are shaped by local social and place identities, including how community perceptions of ‘activists’ leads social resistance to emerge and develop in different ways.

To achieve an understanding of how communities respond to unconventional gas development, we draw upon and contribute to two distinct bodies of literature. First, there is the emerging literature on public perceptions of unconventional gas development that examines the role of place identity in shaping attitudes on this issue (Braiser et al. 2011, Evensen and Stedman 2018, Jacquet 2014, Jacquet & Stedman 2014, Lai et al. 2017, Perry 2012, Sangaramoorthy et al. 2016, Schafft & Biddle 2015, Willow 2014, Willow et al. 2014). We bring this theoretical conversation about place identities together with a second body of literature on social identity theory, which has seen a resurgence in growth, exploring the dynamics of what happens when we define ourselves through belonging to social groups (Colvin, Wit & Lacey 2016; Fielding and Hornsey 2016; Huddy, 2015; Lloyd et al. 2013; Spears, 2011; Tajfel, 1974; Turner, 1975).

Our argument consists of three main claims that build on each other. First, we contend that place identity shapes the ways that communities relate to unconventional gas developments. Second, communities who oppose unconventional gas development often do not identify with activism, seeing it as something that ‘outsiders’ do, not regarded as a part of local social identities. Third, we assert this view of activism and activists produces specific forms of resistance, in which ‘knowledge’ and ‘information’, but also neutrality and objectivity, (or at least the *semblance* of objectivity and neutrality) play an intrinsic role.

Theoretical foundation

Concepts of social and place identity are critical to understanding social resistance to contentious land use change (Devine-Wright, 2009; Phadke, 2011; Veenstra et al., 2016). In this paper we bring place identity and social identity together to examine how social responses toward unconventional gas developments take place in communities across four development nations. We argue that while place identity is important for *whether* resistance emerges, social identity is key to *how* social resistance emerges, depending on how people perceive ‘activism’ and ‘activists’.

‘Place identity’ captures how aspects of the physical landscape and natural world become internalised in one’s identification with who ‘one is’. Living in a certain geographical environment influences ‘the ways in which physical and symbolic attributes of a place contribute to an individual’s sense of self’ (Devine-Wright 2009, p. 428). Closely related are positive emotional connections with familiar locations (Jorgensen and Stedman, 2006). Autobiographical experiences with community and place have been described as having the ability to transform local communities and landscapes into a ‘symbolic extension’ of self, providing ‘important mechanisms through which identity is defined and situated’ (Hummon 1992, p258). Key terms and narratives are used to describe salient aspects of places with which people identify, such as ‘farming community’ or the ‘Rainbow Region’ (Jacquet & Stedman, 2014; Luke & Evensen, 2018). It has been well established in the literature that place identity and environmental values are linked to beliefs about health and environmental risks of contentious industrial developments or large-scale land use change (e.g. Jacquet & Stedman, 2014; Luke, 2017; Veenstra et al., 2016). As such, place identity can play an important role in influencing social responses to unconventional gas development.

Social identity theory examines how individuals define themselves according to their group involvement and memberships (Tajfel, 1974) and bridges the concepts of self, group membership, and intergroup behaviour (Spears, 2011). When individuals recognise that they and others are members of a social group, distinctions between one’s own and another group can influence inter-group perceptions and behaviours (Turner, 1975). Seeking to maintain group norms and identity can also result in intergroup conflict and the stereotyping and labelling of those considered to be in the out-group (Spears, 2011; Giddens, 1993; Turner, 1975). Such processes can lead to out-groups being regarded as a group with which association is undesirable, even if the group itself does not self-identify with the label (Turner & Giles, 1984). Local contextual factors can affect the ways in which identity is transformed, and potentially radicalised, through processes such as socio-economic stratification; relationships with place and community; and regional history (Bell and York, 2010; Spears, 2011; de Rijke, 2013; Veenstra et al., 2016; Bugden et al., 2017).

While some authors consider place identity to be part of social identity (Bernardo and Palma-Oliveira 2012), we argue, in line with Twigger-Ross et al. (2003), that social identity and place identity are two distinct aspects of identity, that are co-constructed and co-constituted. This is a dynamic, evolving process. Place identity, such as a place experienced as a farming community or place of natural beauty, can shape how local energy developments are

perceived (Seeliger et al. 2016, van Veelen and Haggett 2017) and influence decisions to oppose such developments (Devine-Wright, 2009; Stedman, 2002). Identifications with social groups, such as farmers, greenies, gas industry employees, or activists, can shape the ways in which social responses take place.

Our case studies demonstrate that different forms of social responses to unconventional gas developments occur where place and social identity intersect differently. In many cases, people who take a position against gas industry developments find it important to be perceived as ‘regular citizens’ and not as activists, ‘greenies’ or ‘lefties’ (i.e., as outsiders). We therefore assert that while there may be deep community concern held regarding unconventional fossil fuel industries, there may be an unwillingness to oppose it through traditional forms of protest such as rallies, civil disobedience, and marches. If, however, the importance of protecting place identity against perceived threats is stronger than concerns about potentially being perceived as an ‘outsider’, the conflict might produce ‘reluctant’ (Gullion, 2015) or ‘accidental activists’ (Wilber, 2012). The matrix below is a visualisation of how (activist) social identity and place identity are co-constituted through, and produce, community responses to unconventional gas developments.

Figure 1. Matrix of place identity and social identity.

Is unconventional fossil fuel development (and its anticipated effects) consistent with local place identity?			
		Yes	No
Is ‘activism’ part of local social identity constructions?	Yes	Acceptance or opposition (depending on other factors, such as company behaviour and global effects of development)	Strong opposition to gas development
	No	Support for gas development	Conflicted decision (concerned silence or ‘accidental’ activists)

Methods

Our assertions are based on case studies in four development nations, across three continents, that have been carried out independently by the authors (Table 1). The methods used across the case studies, most relevant to this article, were interviews and non-participant observation. The authors used thematic analysis to analyse their data and took an inductive approach (Ryan and Russel, 2003; Braun & Clarke, 2006). Emergent themes identified were then compared and discussed between the international teams in relation to the concepts of social identity and place identity, which were manifest as central to each case study.

Table 1. Case study background data

Country	Region	Duration of fieldwork	Nature of data collected	Authors involved
Australia	Northern Rivers (New South Wales) and Western Downs (Queensland)	2011-2017	In-depth interviews; focus group discussions; surveys; attendance at public meetings, review of council minutes and protest events.	Hanabeth Luke

Canada	Province of New Brunswick	2013	In-depth interviews; focus group discussions; attendance at public meetings and protest events	Darrick Evensen
Netherlands	Noordoostpolder	2013-2017	In-depth interviews; informal conversations; attendance at public meetings and protest events; review of meeting minutes and other documents	Elisabet Dueholm Rasch and Michiel Köhne
United States	States of New York and Pennsylvania	2013	In-depth interviews; informal conversations; attendance at public meetings and protest events; review of meeting minutes, mass media, and other documents	Darrick Evensen

In what follows, we first discuss how different elements of place and social identity shape the way that people experience and position themselves towards unconventional gas developments. We then analyse local narratives about ‘activists’ and activism, reviewing how residents do, or do not, claim to identify with such categorisations. We next evaluate how social identity, in relation to ‘activists’, can be seen to shape ways of resisting unconventional gas developments.

How place identity shapes views on unconventional gas development

Place identity plays an important role in shaping the ways in which people experience existing or possible unconventional gas developments (Seeliger et al. 2016, van Veelen & Haggett, 2017). Rural residents often construct place identity through their relationship with the land(scape) itself, and the way that a landscape is perceived and related to is extremely important for whether they will view unconventional gas development as a threat, or a welcome addition (see also Lloyd et al., 2013; Luke & Evensen, 2018, Evensen & Stedman, 2018; Köhne & Rasch, 2018). In our case studies, the most important elements of place identity that shaped how people relate to unconventional gas developments were (auto)biographical experiences, relationships with the natural world, and economic factors. The ways that people give meaning and content to these dimensions of place identity are often important for shaping perceptions of, and responses to, unconventional gas development.

Connection to past, present, future

Autobiographical factors relate to one’s past history and can consist of personal experiences, relations, and memories which attach a particular person to a given place (Hummon, 1992) and often express a ‘rootedness’ in the past. Memories of previous experiences in and of a place can inform a desire to preserve the place for its’ future generations. Together, a shared past and the imagined future of the place, shape future experiences (Bugden et al., 2017). Through this process, autobiographical factors are closely related to other facets of place identity such as natural beauty and economic ties: these various components all work together to shape the way that people perceive the identity of a place.

It is in the Noordoostpolder that autobiographical factors, embodied in the figure of ‘the pioneer’, play the greatest role in the construction of place identity and how people think about unconventional gas development. ‘The pioneers’ were involved in the reclaiming of the land from the sea in the 1930s, an orderly agricultural landscape was created by the first inhabitants of the ‘polder’ in the early 1940s. The role and substantial achievement of their

forefather pioneers is an important shared memory and, as such, has become an important element of people's relationship with the Noordoostpolder landscape (Köhne & Rasch, 2018). Interviewees stated that adding drill rigs to the landscape would be a way of disrespecting this past. As John, a pioneer-son, explained, while looking out over the 'polder: 'Our parents have reclaimed this land from the sea with their bare hands, so how can you even think of placing a drilling rig here?'.

Noordoostpolder residents wished to preserve the rich agricultural land that had been created for future generations, viewing this as inconsistent with the use of fracking chemicals and the associated risks of pollution. Such views were also strongly expressed by many residents of the Northern Rivers, Australia, who were resisting unconventional gas development (Luke, 2017), particularly the importance of preserving the 'magic' and the 'Spirit of the Land' for future generations. In 2016, reflecting back on her role (as a key organiser) in the social movement, one mother stated: 'My mantra was, I would be able to look my kids in the eye and tell them I did everything I could to protect them'.

In other places, autobiographical factors led residents to favour development and view the unconventional gas industry as an opportunity to preserve their place identity for future generations. For example, in Pennsylvania (PA), caring for future generations also emerged as central to place identity, and to support for unconventional development. Residents whose families had been in place for multiple generations in shale gas regions often portrayed the economic growth that came with shale gas development as synonymous with keeping children in the local area; one such individual explained, 'every grandmother wants her grandchildren nearby'. Jobs in oil and gas, or in the many proliferating ancillary industries would reduce youth leaving the area. This same sentiment was palpable amongst interviewed residents and elected community officials in Doaktown, New Brunswick (NB), where the population had declined by over half in the last generation, and where a town official was concerned about the community becoming 'just a wide spot in the road'. Similarly, in the Western Downs, and also in parts of the Northern Rivers (Australia), residents who embraced the coal seam gas (CSG) industry saw it as an important opportunity to provide employment for their youth.

Figure 2: Sign advocating for shale gas developing in Doaktown, where much industry and population had flowed out of the community in recent years.

Visual amenity

Another important facet of how people relate to, and identify with their place, is natural beauty and/or perceptions of the rural idyll (Sherval & Hardiman, 2014). Changes in the landscape brought about by unconventional gas developments were in many cases considered a threat to the visual amenity of a place, thereby threatening people's relationship with that place (Sangaramoorthy et al. 2016, Seeliger et al. 2016, van Veelen & Haggett 2017).

Those who moved, often from the cities, to the Northern Rivers area, known as 'tree-changers' (Bohnet & Moore, 2010), had often done so due to the high value they placed on its natural beauty. These people who were drawn to the area for a specific reason, often many decades ago, sought to protect that beauty and the rural idyll they associated it with (Sherval & Hardiman, 2014). In the United States, residents also often saw their community as a place of 'beauty' and 'inspiration' which needed to be preserved and protected. One man living on the Delaware River in Damascus, Pennsylvania, who had moved to the area 15 years prior, explained how he would cry when driving locally and pondering the potential for lost natural beauty and peace if shale gas development was to occur; his sentiments were shared by other residents who had moved to that area for 'peace and quiet'. Residents of the Noordoostpolder also describe feelings of happiness and fulfillment, of 'coming home and seeing the peaceful and regular landscape' to express how they feel every time they enter the Polder, crossing the bridge from the old to the newly created land.

Whereas in the above cases, unconventional gas developments are considered incompatible with these features of the landscape, in Sanford, NY, attachment to memories of the agricultural landscape produced a pro-shale gas stance. A resident nostalgically recalled days when 150 working farms existed in his town and then sadly explained that only two remain. He, and other residents, including a county planner who worked with landowners on shale gas development, explained that many people see the industry as a way to preserve open space (via lease and royalty payments to owners of large tracts of land, who could then afford to keep their farms intact, instead of needing to sell off the land to be developed in smaller plots). Relatedly, in Doaktown, NB, residents and the mayor saw declining timber mills as bringing the death of their community; the mayor pointed out that sixty existed in recent memory and now two remain. Therefore, some residents saw industry as a welcome and historically apropos aspect of the landscape, and one they would like to see return to the area. In the Western Downs, one interviewee admitted: 'we thought, 'we own the land, we can destroy it, we can do what we like', indicating an attitude towards the land where the natural environment and visual amenity was little valued: he had previously been an advocate for the coal seam gas industry.

Our case studies demonstrate that a relationship with the visual amenity of a place and autobiographical factors are co-constituted: residents want to maintain the landscape they remember, and preserve it for future generations. Demonstrating the complexity of the relationship between place, history and identity, another leader of the social movement in the Northern Rivers explained that the resistance was motivated by it being:

'Very much a matter of remembering and valuing what's always been there. As much as it is saying, well how do we maintain that? You know, that sense of place, that sense of history, that sense of who we are... you know, that's the role of social movements, to keep reminding people about those things.'

Economic dimensions of place identity

Living in rural areas, many people in our case studies linked farming to an economic place identity. In rural areas farming is, by its nature, closely associated with the landscape (Burton, 2004; Burton & Wilson, 2006; Frank et al., 2011; McManus et al., 2012). The role of agriculture as an important part of the landscape, as well as a part of local resident's social identity (i.e., how they define in- and out-groups), has informed stances against, as well as in favour of, unconventional gas development.

Potential impacts on farm productivity was a common theme in our interviews. In the Western Downs, farmers reported concerns around coal seam gas development that competition for groundwater could threaten farm productivity. Several farmers noted concerns regarding the bubbling and flammability of areas in the Condamine River, which flows through the Western Downs, an important water source in a dry region. The Noordoostpolder is emphasised by local farmers to be a productive land, from which the export of potato seedlings plays an important role. This local, historically rooted meaning of productivity was considered as incompatible with shale gas extraction when associated with compromised water supply and toxicity. It was perceived that shale gas extraction in the Noordoostpolder would affect the economic activities through which people interpret this facet of place identity. Farmers' economic activity could be affected by negative perceptions of unconventional gas industries. Other opponents have warned that shale gas exploration could induce a decline in real estate value across the Noordoostpolder by 10 per cent, impacting rural industries with a predicted loss of up to 1400 million Euro (calculated for the timespan 2023-2053) (CE-Delft 2016).

Our case studies nevertheless demonstrate that unconventional gas developments are not necessarily seen as incompatible with farming per se, as long as it would not affect how being a farmer connected them to their place. When farming is viewed as an industrial activity in the landscape, gas drilling may be viewed as an extension of this industrial activity. In the Western Downs, a salient view expressed by farmers was of the place as an already industrialised landscape, and that the gas industry 'can co-exist with agriculture: it's a big area out here' this links to the previous view of the timber industry in Doaktown, NB. Also, in the Noordoostpolder, the emphasis of some on economic benefits has provoked pro-shale gas sentiments. For example, Gerard, a middle-aged, life-long farmer who grew up in the Noordoostpolder, was quick to acknowledge the Noordoostpolder as prime farmland. However, he did not describe this capability as contradictory to hydraulic fracturing: 'We produce the cleanest and the best food of the world, but that is still possible with drilling rigs on the land'. In many of our case studies, unconventional gas described as a source of economic development, related to things like compensation payments for access to land, or opportunities for local companies to provide services to the extraction companies and their employees.

Some farmers in the Western Downs embraced the changes, both social and economic, as memories of more prosperous times appeared to influence positive representations of gas industries. While drilling rigs were considered a hindrance to some farming activities, they were also regarded by some farmers as a way to escape the hardship brought about by many years of drought, while maintaining their farmer identity. In the words of a Western Downs farmer who embraced the industry whole-heartedly: 'If you don't want the wells on your property, you clearly don't have enough debt... this way's better than the old way'. He refers to how Australian farmers often struggle through long periods of drought with little supplementary income, viewing the coal seam gas industry as an opportunity to revitalise the area. In our United States case studies, there was also a memory engrained in people's minds the image of a more vibrant main street, with bustling shops and a thriving agricultural presence, which was now waning (see also Sneegas, 2016, on this topic). Such associations seem to support a pro-gas industry stance; people who viewed rural communities in light of

the busy days of yore generally supported unconventional gas development. This is consistent with the findings of Luke (2017), that lower economic resilience in a place (i.e. fewer and less robust rural industries) is more likely to lead to higher levels of support for unconventional gas development.

Thus far, we have reviewed data on how physical (e.g., beautiful aesthetics, productive land) and symbolic attributes (e.g., vitality, autobiographical associations) of places shaped place identities in our study communities (Bell & York, 2010; Spears, 2011; de Rijke, 2013; Veenstra et al., 2016; Bugden et al., 2017). These identities, in combination with social identity (next section), then help condition beliefs about the extent to which unconventional gas may, or may not, exist as a part of the future of that place.

(Non)activist identifications

Incompatibility of place identity and unconventional gas developments certainly has potential to lead to resistance in some form; nevertheless, our case studies reveal that this resistance can take many forms, and is conditioned by social identities. Often, identifications with ‘activists’ are explicitly rejected. Local people participating in resistance against such developments often portray themselves as ‘accidental’, or ‘reluctant’ activists (Bobel, 2007; Gullion, 2015; Wilber, 2012), or do not include ‘activist’ at all in their narratives of self-identification. While ‘place’ is an important building block of a resident’s identity, local residents may not identify with what they consider to be ‘activist’ groups, because they view activists as outsiders, socially and/or geographically.

How activists are portrayed/perceived

Opponents of unconventional gas developments might eschew the ‘activist’ title because of the negative connotations associated with people labelled ‘activists’. Activists are often described as ‘the other’ and ‘the outsider’, as nonlocal or undesirable to be associated with (Lloyd et al., 2013), and/or as providing information that is biased (Kohne & Rasch, 2018). In many cases, opponents of gas developments who engage in protests, demonstrations, and civil disobedience are called ‘professional activists’ by gas industry proponents, but sometimes this term is also used by opponents. Interviewees in the ‘polder (who were actively resisting developments) were quick to chide anti-gas-development leaders with the objectification of being ‘professional activists’. The implication of this is that their responses to unconventional gas development were not viewed as valid in the local community due to activism not being part of local social identities. In Sussex, New Brunswick, a resident referenced how diatribes on Facebook labelled fracking activists as people on ‘welfare’ (state benefits) and people who ‘smoke weed’ – seeking to portray them as a fringe liberal out-group. In such cases, activists were placed as outsiders to a shared history and culture, even if they were, in-fact locals, albeit of a lower social status (Holland & Lave, 2009; Spears, 2011).

Distrusted activism

Residents often do not identify with activism as part of their social identity due to past tensions and historical relationships. The long-held mistrust of activists by Queensland farmers stems from the era of Bjelke-Peterson, a powerful conservative premier of Queensland from 1968 through to 1987. Two points are relevant to our story: Bjelke-Peterson achieved political stability through the suppression of political dissent, with any activism immediately and harshly dealt with as a ‘menace’; he also tripled his rural supporter base by building personal relationships with farmers, thus giving farmers a direct connection to government, helping to bolster their social and economic status in rural communities (Alvey & Ryan, 2006). Ongoing conflict over land-clearing regulations of the 1990s amplified divides between farmers and ‘greenies’, generally perceived to come from outside of the Western Downs. The negative

associations played an important role in how farmers, unhappy with the operations of the coal seam gas industry, challenged its progress on their own properties. Farmers were used to having strong connections with government, so their approach was to work *with* government and inside the respectable confines of the law.

The majority of Noordoostpolder residents who organised against shale gas, also looked negatively upon what they considered to be activists – environmental organisations whose policy preferences may constrain farmers’ productivity, similar to the Australian ‘greenie’ label. As discussed above, farmers’ productivity is an important element of Noordoostpolder place identity and is considered to be opposed to ‘green’, ‘idealistic’ or ‘leftist’.

Activist outsiders

In several of our case-studies, resistance towards unconventional gas-developments originated in places outside the locations that these developments were planned for. As a consequence, local residents did not feel ownership over activist strategies. They often questioned the motives and interests of activists, frequently due to past associations with activists, and certainly did not identify with the activists. In the US case studies, local residents cited distaste for people from outside the community coming in and voicing their opinions. This was the case in Damascus, PA, where a member of a pro-industry group explained that much of the opposition to development actually comes from New York State, which is just on the other side of the river on the township’s eastern border. The key activist group there, ‘Damascus Citizens for Sustainability’, is actually based in NY, a point that pro-development interviewees readily critiqued. In a sense, the issue at stake was one of local democracy – who has a say in decision making? Pennsylvanians were affronted by New Yorkers commenting on something that was not in their jurisdiction (even though this is not actually true, because the Delaware River, a major water source about which people opposing shale gas were concerned, forms the border between the two states).

In the Western Downs, activists were referred to as ‘rent a crowd’. As one farmer stated, ‘There were very few landholders involved in (activism), probably based in Sydney’ reinforcing the idea that anyone involved in activism was not likely to belong to the Western Downs. Protesters who *had* travelled from the Northern Rivers and elsewhere organized small protests, but did little, in their rainbow clothing, to entice potentially sympathetic (but traditionally conservative) Western Downs farmers to pick up a placard and join their cause (Lloyd et al. 2013). As such, few ‘protests’ were organised by Western Downs farmers, in all interviews, only one example was given, where seven farmers faced twenty-five police.

Noordoostpolder residents in favour of, as well as opposed to, shale gas developments would disregard activists as ‘these leftist people that come and tell the same story again and again’. When the Dutch branch of ‘Friends of the Earth International’ came to the Noordoostpolder to share information about shale gas developments, they were described as ‘those people from Amsterdam that come here to convey their own message’. They were portrayed as not interested in the local perspective, but most of all they were not assessed to be neutral or objective. Noordoostpolder inhabitants said that they wanted objective information about shale gas and noted that the activists only used shale gas as a way of ‘using the shale gas controversy to tell the story they always tell’.

Another ‘activist category’ that is often viewed with scepticism, is ‘newcomers’ to an area. Like activists who do not live locally, they are described as not representing the ‘real’ locals. This is especially the case in the Western Downs and in the US case studies. ‘Activists’ were viewed as non-locals and unwelcome ‘others’, either due to actually not living locally or having lived there for less time than families who had been settled there for generations.

In the Western Downs, the first residents to openly resist coal seam gas development lived on some small, lifestyle blocks located on poor-quality land adjacent to a gas field that was one

of the first major gas expansion areas. The residents, who had settled on 'cheap land' offered for sale in the 1980s, were labelled by the farming community using the derogatory term 'blockies', seen both as 'newcomers' and 'troublemakers' of lower socio-economic status (another well-established influencer of how social identities form (Luke, 2013; de Rijke, 2013; Spears, 2011)). The first protest group, the 'Western Downs Alliance' was formed principally by the 'blockies', who conducted some isolated protest activities in 2010: 'I just sat in the road and stopped the trucks'. He didn't initially view himself as an activist, but later accepted the term when he realised that 'someone had to tell people about what had happened (in the Western Downs)'. Some of the local farmers interviewed, who were opposing coal seam gas companies in land court, rejected 'blockie' and 'activist' identities, keeping away from any potential communication or collaboration with those openly involved in resistance. A farmer who had described having been through 'two years of depression and anxiety', due to (unwelcome) negotiations with CSG industry representatives on her land, gave her view of the blockies: 'They're feral; they just look disgusting'. The 'blockie' label intersected with the 'activist' label for farmers interviewed: 'I don't know much about how credible they are ... but to me the Lock the Gate thing is a heap of blockies'; and: 'They're just activists'.

In several of our communities in the United States, this (derogatory) labelling of opponents as 'activists' by long-time residents became a conflict between what numerous NY and PA residents characterised as the 'old boys' or 'landed aristocracy' vs. the 'newcomers' or 'interlopers'. One opponent of shale gas development, a farmer from Dryden, NY, stated that her perspectives on the issue were not considered valid by some in the community because she had 'only' lived there for thirty years; other farmers in the area could point to family having lived there for 100-200 years. Several opponents of shale gas development in New York and Pennsylvania perceived people whose families lived there for generations as trying to delegitimise them, because as 'newcomers' they did not represent the 'true' interests of the community.

There are, of course, also people that self-identify as an activist and are considered to belong to the affected community. We have found that they are often not accepted as representatives of the affected those communities. An example of this is the first activist group 'Shale Gas Free Noordoostpolder' that emerged in the 'polder, was not accepted by the broader community. It was characterised as 'too leftist', mainly because the most important founder, Hylke Hekkenberg's appearance was very much in line with stereotypical perceptions of activists: living in an illegal squat; having good connections with Friends of the Earth and occupying the one and only seat of the Green Left party in the Municipal Council. However, in order to gain more credibility with the broader public, NO Shale Gas Noordoostpolder was founded a year later, portraying an explicitly non-activist image. Interviewees explained that this was a deliberate strategy for being able to speak to a broader public. When Tegengas ('against gas', but also 'counter movement' in Dutch) was founded, Hylke became the representative of 'Shale Gas Free Noordoostpolder' within this broad partnership against shale gas.

In tune with what occurred in the Noordoostpolder, Drew Hutton, a Friends of the Earth campaigner was a 'Chinchilla boy', born in the heart of the Western Downs, who became a leader of the 'Lock the Gate', a national protest group organising against coal and gas. Due to negative historical associations of activism 'greenies' as people that who wreck farmers' livelihoods, local farmers strongly rejected attempts of activists such as Hutton to mobilise them as a group. There was, however, a notable change in attitude towards Hutton once the gas boom had passed. According to a 2016 repeat interviewee who had labelled activist Drew Hutton as 'a grandstander who wanted to push his point of view', admitted that he was 'prepared to give them more room now... people like Hutton wanted to bring things to light. His credibility has more than doubled over this time.' Such comments indicate that the

perceived social identity of ‘activists’ can change, and in this case, the word ‘activist’ appeared not to be as dirty as it used to be.

Accepted activism

The above cases contrast with the case of The Northern Rivers, where being an activist was already a far less marginalised social identity before the coal seam gas industry sought to develop there. Referred to as the ‘Rainbow Region’, the place has a fundamentally different identity, dating back to the ‘Aquarius festival’ of love and peace that took place in 1973. The festival altered the demographics of the region as young people were attracted to live there, embracing sustainable and communal ways of living (Lismore-City-Council, 2015). In the years that followed, hundreds participated in protests to stop rainforest logging, a campaign that achieved significant success and put activism in a positive light amongst Northern Rivers residents (Bible, 2007).

When the CSG industry sought to develop in the Northern Rivers, those who had brought with them experience of activism from successful local protests in the 1970s, quickly became some of the leaders and heroes of the new social movement. Social resistance rapidly gained momentum. For example, in early 2011 in Lismore (a city in the centre of the region), an organised protest march drew a crowd of just a few hundred people. By October, a ‘national day of action’ saw approximately 20,000 people march, many in locations across the Northern Rivers. By 2012, Northern Rivers protests were drawing crowds of up to 6,000 people, with the highly organised ‘Bentley’ blockade lasting for about three months. Local narratives around unconventional gas development were largely framed by the resistance movement, including the national protest group ‘Lock the Gate’, which was heavily influenced by Northern Rivers activists. Civil disobedience was an important aspect of activist strategies, with workshops training residents in non-violent direct action, within which strategic arrests were regarded as an important strategy (e.g. Ricketts, 2012). In 2013, up to 50% of people in some local government areas actively participated in protests and marches to resist coal seam gas development (Luke, 2017). Activism became a building block of local place and social identities, rooted in shared experiences. Pressure from the bottom-up was placed on all seven Northern Rivers local councils to publicly announce their opposition to coal seam gas development, all of whom had done so by 2014, even those who had initially been highly supportive of the CSG industry (Luke, 2017).

Figure 3: Some of the 'Girls Against Gas' at the Australian Parliament: activist was not a dirty word in all of our case studies. Source: Lock the Gate (2014)

A singular community in North America that somewhat paralleled the Northern Rivers example was Richibucto, Canada. The activist identity seemed to be initially foreign to at least the English-speaking population in the region, however it became more accepted as resistance emerged against the shale gas industry. This case was atypical in that it was the only community of nine North American study sites where everyone who was highly visibly active in the community was supporting the same position (in this instance, anti-gas). This visibility seemed to enable the activists to frame the discourse. 'Activist', although still not used much, perhaps due to concerns of how this word was perceived elsewhere in the province, was seen as a defender of community values and of the highly-prized local environment. Richibucto and the surrounding area were split into three main populations: the English-speaking; the French-speaking; and the First Nation (indigenous people who had a reservation there). Many of these people who previously seemed to have little in common banded together, formed new relationships and shared a communal identity through activism. Activism became an accepted, even glorified aspect of local place and social identities (e.g. McQuarrie, 2017).

Figure 4: Sign opposing shale gas development in Richibucto, the Acadian community on the coast of New Brunswick, Canada.

In sum, while activism was accepted in some cases, these examples were the exception rather than the rule. Negative connotations of ‘activists’ and ‘activism’ led residents in several of our case studies to choose to disassociate from activists, instead choosing to conduct acts of resistance not associated with traditional ‘activism’. The section below reveals some of the different ways that non-activist acts of resistance played out in our various case study areas.

(Non-)Activist acts of resistance

Social organizing as a response towards unconventional gas developments is, as we have seen, not only realised by people who consider ‘activism’ as a part of their social identity. In what follows, we explore how organized groups and individuals who do not identify as activists *per se*, do engage in ‘acts of resistance’. Not identifying as an activist often goes hand in hand with attempts to distance themselves from stereotypical activist activities, such as marching in protests and attending rallies. We explore how resistance toward unconventional gas developments is organized by these people who are against unconventional gas developments, but do not consider themselves ‘activists’.

In the Netherlands, Noordoostpolder residents organized themselves in an inclusive way to represent all groups of the place, whereas in the Western Downs, farmers engaged in opposition by way of individual lawsuits (the only legal avenue for those in Queensland who wished to refuse land-access to CSG companies). In so doing, they distanced themselves from activism, which they viewed as important for being taken seriously by their wider communities. Below, we first explore how this distancing is played out in the ways in which people position themselves. We then go on to explore how the production and use of ‘objective knowledge’ and legal procedures were considered a viable way to mobilise against unconventional gas developments, while avoiding an ‘activist’ label, which could lead to key messages being ‘disqualified’.

Following the rules, staying within the law

In line with not identifying with activism and activist strategies such as civil obedience, our case studies show that social mobilisation often includes strategies that are linked to legal regulations and finding legal spaces (Turton, 2017).

This was the case in even the Northern Rivers region: while many were happy to march in protest, and a smaller number were happy to climb a drilling rig or lock-on to equipment, not everyone was comfortable to be directly associated with activism. One example of being active in the resistance movement, whilst not being an ‘activist’, was the ‘Gasfield Free Northern Rivers’ campaign. This sub-campaign involved holding an information meeting in a township, encouraging local residents to survey their own street on perspectives on gas industry development. Once surveyed (and found to be majority in opposition), a ‘gasfield free’ pledge was presented to a local politician at a prominent event. From this, entire towns were then declared ‘gasfield free’, and yellow signs erected. This approach proved to be a most effective method for engaging more conservative citizens to support the aims of the movement, with hundreds of communities participating across the states of New South Wales (at least 128 communities) and Victoria (75 communities) (Gasfield Free Northern Rivers, 2018).

A similar strategy was undertaken by Tegengas in the Noordoostpolder. They organised information evenings in each village and then would close the evening with a poll (pro or con shale gas) among the participants. In this way, they gradually built not only awareness among the inhabitants, alongside support for their cause, but also legitimacy for their claim to be recognised as a serious discussion partner for the government. Before Tegengas was founded, the municipality had already declared itself ‘Shale Gas free’ in 2013.

Figure 5: Tegengas, a conservative consortium of local business. Note that Hylke Hekkenberg (centre) was allowed to be part of public events only once they had already gained broad support in the community. Source: Michiel Köhn (2013)

Western Downs farmers engaged in opposition by way of individual lawsuits and the resistance toward unconventional gas developments is characterised remained fragmented. The Basin Sustainability Alliance (BSA), was formed by an alliance of Western Downs

farmers to lobby the Queensland Government to achieve the best outcome for farmers, by, 'trying to be a conservative, middle-of-the-road group'. Most of the farmers interviewed who were not happy with gas industry developments chose to resist by taking on personal legal battles: there was little coordinated approach to resistance outside the legal system and the BSA. One farmer who in 2013 said, 'We've got to lock the gate and not let anyone in', spent eight years 'battling' the gas and coal industries by following due legal process in land court. He eventually sold his property and moved from the land to town. Such forms of resistance, always following the rules, thus emerged as an ineffectual as a way to slow unconventional gas development, as a founding member of the BSA reflected: 'I think they (the government) provided us with a lot of lip service, but nothing really changed...'.

Distancing from activism

An important resistance strategy we identified is to distance one's self and resistance group from 'activism' and activists as a way of mobilizing the broader public, to get more traditionally conservative people involved. This was a first step towards being taken seriously. In the view of Noordoostpolder residents, activists were regarded as 'always against everything and do not offer alternatives'. In the Noordoostpolder, people identified with 'the partnership against shale gas' but took offense every time this group was labelled 'activists' in the media. For this reason, the local partnership against shale gas developments distanced itself from an activist label – they wanted to be at the table where decisions were made by politicians and policy makers. Even when many people in the Noordoostpolder had turned against shale gas developments, they still made a big point of NOT being an activist organisation. In their view, they would otherwise lose the support that they had built amongst farmers and entrepreneurs. It was often discussed during meetings how important it was to appear as neutral, objective, and representative of the whole 'polder. Often the local newspaper would write things like, "the activist group Tegengas..." This type of description would be picked up at the group meetings; calls would be made to rectify it by having "activist group" changed into "partnership".

In North America, some opponents of unconventional gas developments say that they shunned the title 'activist' to make their arguments have more weight and policy relevance, but all shale gas supporters did not even consider this title – 'activist' – as applicable to them. This denial is despite them being active in much the same way as their pro-gas opponents, for example, campaigning for legislation to endorse development, holding political rallies, turning out in droves to governmental hearing and local government meetings. In New York, where a moratorium existed, there were a huge number of groups who were advocating vociferously both for and against development, with regular counter-protests occurring in the same place and at the same time. Not many people from these rural areas identified with the word 'activist' and most even have a cited distaste for people from outside the community coming in and voicing their opinions. This led to many local people on all sides of the issue advocating strongly for the State Government to take their position.

A Dryden, NY, resident explained, 'I am not an activist; I am a hermit. I like it that way.' After she attended a few meetings and heard from other locals about development and its potential effects, she says that she became 'terrified', which 'forced' her to become involved, leading a substantial grassroots door-to-door information campaign, although still not as a self-identified 'activist'. A Richibucto, NB, resident described the French-speaking Acadians in her community as 'like Hobbits; we try to stay away from the big people', but she felt the issue of unconventional gas development was simply too important for her to remain quiet. She actively attended local opposition meetings, coordinated opposition across social media, and lobbied the government through meetings with officials and written comments. Beyond those entirely eschewing 'activism', many 'reluctant activists' emerged across our case studies (Gullion 2015). One example is of a farmer who grudgingly became a self-proclaimed

‘activist’ against shale gas development in Van Etten, NY. She asserted about people supporting shale gas development, ‘some people know the issues, but they just don’t care about the community’. She, therefore, engaged in door-to-door campaigning to inform people about the implications of shale gas development for the community.

Two of our study areas are notable outliers – both the Northern Rivers and Richibucto were locations in which the ‘activist’ social identity was not stigmatised to the same extent as discussed above. However, even in the Northern Rivers, in early 2013, activist leaders of an urban environment centre reported to take ‘a back seat’ because, they perceived that politically conservative ‘people impacted [by the drilling] would not talk to Greenies... Farmers wouldn’t have anything to do with it [if we were involved].’ (Mercer and de Rijke 2014: 294).

Production and dissemination of ‘objective’ knowledge as an act of resistance

The use and communication of knowledge, including its credibility, has been identified as an important, albeit complex, feature of perceptions of, and resistance against, conventional gas development (e.g. Mercer, de Rijke & Dressler 2014; Espig, 2018). The focus on distancing oneself from ‘biased’, ‘leftist’, ‘non-neutral’ activism often occurs in conjunction with, and appears to feed into, another act of resistance: the production and dissemination of knowledge that is considered neutral and objective. The production of locally trusted knowledge about (possible) impacts of unconventional gas development is an important act of resistance (Rasch & Köhne 2017) because a lack of information can make people feel excluded and/or disempowered (Devey et al. 2014; Bec et al. 2016). Dissemination of such knowledge happens through websites, local information meetings (Lis and Stasik 2017), songs (Highby 2014), and film screenings (Espig 2018; Vasi et al. 2015). Additionally, information shared by those opposed to unconventional gas developments is preferably based on what is often accepted as scientific knowledge, presented as facts.

The production of ‘objective’ and ‘neutral’ knowledge was one of the key activities conducted by Tegengas. They hired a consultancy firm to research the potential economic consequences of shale gas extraction for the Noordoostpolder, and the choice of consultancy firm was based on it not being one that could be linked to something ‘left’ or ‘green’. This focus on not being an activist in the Netherlands translated into the use of measurable and scientific knowledge to gain support for their cause from the wider community, and politicians. While in the ‘polder, many people’s opposition to shale gas appears to be rooted in an emotional attachment to the place, the arguments they use against shale gas are mostly economic.

The theme of biased information was also manifest in Canada. In Sussex, NB, multiple interviewees at a focus group discussion explained how they intentionally distanced themselves in every way possible from the film, ‘Gasland’, as they suspected questionable assertions were made in the film (e.g., about water contamination and methane migration), and they sought to be seen as objective. They explained that without appearing objective, the chance that local or provincial decision makers would grant them an audience or listen to their concerns would be highly diminished. Some interviewees in Richibucto, NB, were also heavily involved in the oppositional movement at the provincial level. They stated that the most important messages that they shared with provincial officials had come from the Province’s Chief Health Office and from university scientists, as these would be the most difficult to dismiss as biased sources.

In the Western Downs of Australia, the Basin Sustainability Alliance (BSA), shared an aspiration to provide the best available scientific information and lobby for more research to be carried out, particularly in regards to water impacts. One farmer, a BSA founder, explained how proud he was of the ‘great research done’ into water impacts, which they

portrayed as being prompted by the BSA. In the other Australian case-study, the Northern Rivers, focusing on collecting and disseminating credible scientific and legal information was an important strategy from the start. While activists continued to be viewed broadly by local residents as ‘lacking credibility’ in the Western Downs, the social movement that developed in the Northern Rivers placed scientists at its front and center.

Similar to Tegengas, early activities of Northern Rivers protest groups included ‘information nights’, where a legal expert and scientist sat on either side of the ‘landholder’ from the Western Downs (considered to be a ‘blockie’ back in the Western Downs). Great pains were taken to ensure that the information they shared appeared credible and was science-based. Documents were also developed by an academic institute, distributed by the social movement, attacking the economic benefit estimates of the coal seam gas industry. The woman who became the Northern Rivers Lock the Gate coordinator was herself an environmental scientist, with strong capacity for science communication. Following a local government election poll that identified 87% of the electorate to be opposed to coal seam gas development (Luke, Lloyd, Boyd & den Exter, 2014), a Northern Rivers Council commissioned scientific research into air and water impacts. Leading activist Drew Hutton later remarked that science had played an important role:

‘...without those scientists the Industry would have torn us to shreds. That was real information which seriously questioned the integrity of what the Industry is doing. It’s given us the knowledge which has armed us for confronting the Industry.’

Especially through their use of scientific information, and an emphasis on substantial knowledge gaps around environmental impacts, like many communities resisting unconventional gas development, Northern Rivers activists were able to gain increasing credibility and broader support within their community, while effectively impacting on industry credibility in the eyes of those residents.

In New York, however, nearly everyone expressing views on the issue by the end of the six-year moratorium was mobilised on one side or the other, which left little publicly visible neutral ground. ‘Objective’ knowledge was not an equally important goal in each of the case studies, thus, the sharing of unbiased information may be perceived as less essential in cases where large sections of the public have already formed a strong view on the issue. This could also be the case where sources accepted as genuinely neutral were few and far between. Additionally, it was not essential in NY to focus heavily on objective knowledge, because shale gas industry proponents did not have a monopoly claim on objectivity.

Using scientific, objective (not lay or emotive) evidence to present arguments against unconventional gas industries can thus be seen to be key in the strategies for resistance, especially for mobilising substantial numbers of people to oppose developments. This element was employed across many study communities, but it was especially important in areas where opponents eschewed the activist label, where credible knowledge underpinned arguments that convinced the more conservative residents to oppose unconventional gas development.

Concluding reflections

A growing volume of research is examining the role of place and identity in shaping views on and reactions to extractive energy development (see Introduction). We have forwarded this area of theoretical inquiry by focusing on how the relationship between place identity and social identity can foster varying (and quite divergent) reactions to such development. Place identity, social identity, and resistance to extractive development appear to be

intimately related. Place identity combined with social identity is important for *whether* resistance emerges. Social identity is key to *how* social resistance emerges. Resistance can often be seen to emerge from challenges the unconventional gas industry may present to elements of place identity, but it may also be constrained by which social identities are accepted, or are at least acceptable in different places. Across four nations and multiple study communities, there were a wide variety of social identities and local connections through place identity; subsequent orientations to being an ‘activist’; and manifestations of resistance to unconventional gas development.

The ways in which economic, visual/natural elements and autobiographical experiences of a place intersected, were extremely important aspects of place identity that shaped whether unconventional gas developments were broadly accepted or rejected in each case. Historical elements of place were an important facet of place identity, however *the ways in which* people connected with their place, past and present, was important for whether gas industry developments were considered either a threat to, or a way to rejuvenate, those memories. In the ‘polder, the memory of the pioneers, who created the productive landscape with their bare hands, played an important role in residents’ decisions to resist shale gas development. Equally, in the Northern Rivers and Richibucto, living sustainably and connecting with the natural beauty of a place emerged as an important element, viewed as at odds with unconventional gas development. However, in places such as Pennsylvania and the Western Downs, the unconventional gas industry was seen as an opportunity to experience a ‘vibrant’ rural centre once again. In these ways, considering the needs of future generations was important for people when seeking to either ‘protect’ place from, or ‘revitalise’ place with, unconventional gas development.

We observe that when threats to place identity emerge, people primarily seek to respond in ways that do not force them to undertake actions they associate with an out-group: they seek a response consistent with their pre-existing social identity. In these cases, this strategy often meant avoiding the ‘activist’ label. For those who did not, existing stigmatised elements of identity had the potential to compound negative perceptions and labelling of residents seeking to resist unconventional gas development. There were a number of cases in which local residents were actively resisting the gas extraction industries, but would not accept the social identity of ‘activist’, and conversely, instances in which such an activist identity was unproblematic, or even sought after. In case studies where unconventional gas development was considered at odds with place identity, ‘activist’ became a label variously accepted (Northern Rivers and Richibucto); reluctantly taken on (New York); or eschewed entirely (Western Downs, Noordoostpolder, Sussex, Pennsylvania). Often it was a label thrown, against their will, at those opposing development.

Nevertheless, we repeatedly observed instances in which local residents were highly active in opposition, but would not accept the social identity of ‘activist’. This ‘resistance to resistance’ has clear implications for framing of oppositional movements and approaches to viable resistance globally. This could be regarded as particularly relevant for residents in areas confronted with potential unconventional gas development that may be seeking to engage in viable resistance. They could be taking cues from nations with more experience to date (see articles in this special issue on Algeria, Argentina, China, Mexico, New Zealand, and South Africa). Knowing how labelling and resistance approaches intersect with social identity could be particularly valuable for such communities.

While our findings may have been limited by having different researchers using slightly different approaches across nations, and at different times, a number of parallel themes emerged as salient across case studies. While in some places, research was conducted over a short time frame, in other locations it continued for several years, which limited our ability to draw conclusions around the ways in which social and place identities continued to

emerge in each case -further research and comparison could provide deeper insight into the ways in which activism can influence a place identity.

Returning to the matrix in Figure 1, several of our study communities fell into the quadrant where unconventional gas development is not consistent with place identity, and 'activism' is not part of local social identities. These included: the Noordoostpolder, New York, and segments of the population in the Western Downs, New Brunswick, and Pennsylvania. In these cases, approaches to opposing development were constrained by a perceived need to avoid the 'activist' moniker, due to its incompatibility with local social in-group/out-group identities. Local residents were careful to distance themselves from 'activism', not engaging in protest and civil disobedience activities characteristic of 'activists'. Instead, they tended to employ measured, neutral, objective language and worked to bring together a range of interests through fact-based information sharing and other fairly conservative strategies.

Other communities did not appear to reject a social identity opposed to 'activism', but in these cases, there still was a place identity inconsistent with unconventional gas development. There, reactions to development were markedly different. Where the activist social identity was accepted (i.e., in the Northern Rivers, and to a slightly lesser extent in Richibucto, NB), more traditional protests such as marches, blocking roads, and locking oneself to gas industry equipment became viable means of resistance. In these places, the resistance to unconventional gas development actually strengthened the acceptance, even glorification, of an 'activist' social identity. At the other end of the spectrum, where development was considered to be consistent with place identity and the social identity of 'activist' was eschewed (i.e. portions of the population in the Western Downs and Pennsylvania), unconventional extraction was supported, and there was little interest in acts of resistance.

References

- Bernardo, F., & Palma-Oliveira, J. M., 2012. Place identity: A central concept in understanding intergroup relationships in the urban context. *The role of place identity in the perception, understanding, and design of built environments*, 35- 46.
- Bell, S.E., York, R., 2010. Community Economic Identity: The Coal Industry and Ideology Construction in West Virginia. *Rural Sociology* 75, 111-143.
- Bible, V., 2007. *Aquarius Rising: Terania Creek and the Australian Forest Protest Movement*. School of Arts. University of New England, Armidale, p. 75.
- Bobel, C. 2007. 'I'm not an activist, though I've done a lot of it': Doing Activism, Being Activist and the 'Perfect Standard' in a Contemporary Movement. *Social Movement Studies*, 6(2), 147-159.
- Bohnet, I. C., & Moore, N., 2010. Sea-and Tree-Change Tree-change Phenomena in Far North Queensland Far North Queensland, Australia: Impacts of Land Use Change and Mitigation Potential. In *Demographic Change in Australia's Rural Landscapes* (pp. 45-69). Springer, Dordrecht.
- Boudet, H. S., Zanocco, C. M., Howe, P. D., & Clarke, C. E., 2018. The Effect of Geographic Proximity to Unconventional Oil and Gas Development on Public Support for Hydraulic Fracturing. *Risk Analysis*. [page numbers?]

Bradshaw, M., & Waite, C., 2017. Learning from Lancashire: Exploring the contours of the shale gas conflict in England. *Global Environmental Change*, 47, 28-36.

Brändle, C., Lis, A., Fleischer, T., Evensen, D., & Mastop, J., 2016. *Prerequisites for a Social Licence to Operate in the (Shale) Gas Industries*. M4ShaleGas Consortium. Available from: <http://www.m4shalegas.eu/reportsp4.html>.

Braun, V., & Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Bugden, D., Evensen, D., & Stedman, R., 2017. A drill by any other name: Social representations, framing, and legacies of natural resource extraction in the fracking industry. *Energy research & social science*, 29, 62-71.

Burton, R. J., 2004. Seeing through the 'good farmer's' eyes: towards developing an understanding of the social symbolic value of 'productivist' behaviour. *Sociologia ruralis*, 44(2), 195-215.

Burton, R. J., & Wilson, G. A., 2006. Injecting social psychology theory into conceptualisations of agricultural agency: towards a post-productivist farmer self-identity? *Journal of Rural Studies*, 22(1), 95-115.

Butler, C., & Adamowski, J., 2015. Empowering marginalized communities in water resources management: Addressing inequitable practices in Participatory Model Building. *Journal of Environmental Management*, 153, 153-162.

Clarke, C. E., Bugden, D., Hart, P. S., Stedman, R. C., Jacquet, J. B., Evensen, D. T., & Boudet, H. S., 2016. How geographic distance and political ideology interact to influence public perception of unconventional oil/natural gas development. *Energy Policy*, 97, 301-309.

Clarke, C. E., Hart, P. S., Schuldt, J. P., Evensen, D. T., Boudet, H. S., Jacquet, J. B., & Stedman, R. C., 2015. Public opinion on energy development: The interplay of issue framing, top-of-mind associations, and political ideology. *Energy Policy*, 81, 131-140.

Colvin, R.M., Witt, G.B., Lacey, J., 2015. The social identity approach to understanding socio-political conflict in environmental and natural resources management. *Global Environmental Change*, 34, 237-246.

Cortese, D.K., 2015. I'm a 'good' activist, you're a 'bad' activist, and everything I do is activism: Parsing the different types of 'activist' identities in LGBTQ organizing. *Interface* 7, 215-246.

de Rijke, K., 2013. Hydraulically fractured: Unconventional gas and anthropology (Respond to this article at <http://www.therai.org.uk/at/debate>). *Anthropology Today*, 29(2), 13-17. doi:10.1111/1467-8322.12017

Devine-Wright, P., 2009. Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology* 19, 426-441.

Dono, J., Webb, J., & Richardson, B., 2010. The relationship between environmental activism, pro-environmental behaviour and social identity. *Journal of Environmental Psychology*, 30(2), 178-186.

Espig, M., 2018. *Getting the science right: Queensland's coal seam gas development and the engagement with knowledge, uncertainty and environmental risks*. PhD Thesis, University of Queensland.

Evensen, D., & Stedman, R., 2018. 'Fracking': Promoter and destroyer of the good life. *Journal of Rural Studies*, 59, 142-152.

Evensen, D., & Stedman, R., 2016. Scale matters: Variation in perceptions of shale gas development across national, state, and local levels. *Energy research & social science*, 20, 14-21.

Evensen, D.T., Jacquet, J.B., Clarke, C.E., Stedman, R.C., 2014. What's the 'fracking' problem? One word can't say it all. *The Extractive Industries and Society* 1, 130- 136.

Fielding, K. S., & Hornsey, M. J., 2016. A social identity analysis of climate change and environmental attitudes and behaviors: Insights and opportunities. *Frontiers in psychology*, 7, 121.

Frank, E., Eakin, H., & López-Carr, D., 2011. Social identity, perception and motivation in adaptation to climate risk in the coffee sector of Chiapas, Mexico. *Global environmental change*, 21(1), 66-76.

Freeman, J., 1975. *The Politics of Womans Liberation*. New York: David McKay.

Gasfield Free Northern Rivers., 2018. *Gasfield Free Communities*. Available from <http://csgfreenorthernrivers.org/csg-free-communities>

Giddens, A., 1994. *Beyond left and right: The future of radical politics*. Stanford University Press.

Gullion, J. S., 2015. *Fracking the neighborhood: Reluctant activists and natural gas drilling*. Cambridge: MIT Press.

Huddy, L., 2015. Group Identity and Political Cohesion, *Emerging Trends in the Social and Behavioral Sciences*. John Wiley & Sons, Inc.

Hummon, D.M., 1992. Community attachment: Local sentiment and sense of place. *Human Behavior & Environment: Advances in Theory & Research*, 253-278.

Holland, D., Lave, J., 2009. *Social practice theory and the historical production of persons, An International Journal of Human Activity Theory*. The Center for Human Activity Theory, Kansai University, pp. 1-15.

Jacquet, J. B., 2014. Review of risks to communities from shale energy development. *Environmental science & technology*, 48(15), 8321-8333.

Jacquet, J.B., Stedman, R.C., 2014. The risk of social-psychological disruption as an impact of energy development and environmental change. *Journal of Environmental Planning and Management* 57, 1285-1304.

Klein, O., Licata, L., 2001. Explaining differences between social groups: The impact of group identification on attribution. *Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie* 60, 244-252.

Klar, M., & Kasser, T., 2009. Some benefits of being an activist: Measuring activism and its role in psychological well-being. *Political Psychology*, 30(5), 755-777.

Köhne, M., & Rasch, E. D., 2018. Belonging to and in the Shale Gas Fields. A Case-Study of the Noordoostpolder, the Netherlands. *Sociologia Ruralis*. [page numbers]

Ladd, A. E., 2018. *Fractured Communities: Risk, Impacts, and Protest Against Hydraulic Fracking in US Shale Regions*. New Brunswick, NJ: Rutgers University Press.

Lismore-City-Council, 2015. *History of Lismore*.

Lloyd, D.J., Luke, H., Boyd, W.E., 2013. Community perspectives of natural resource extraction: coal-seam gas mining and social identity in Eastern Australia. *Coolabah* 10, 144.

Luke, H., 2017. Social resistance to coal seam gas development in the Northern Rivers region of Eastern Australia: proposing a diamond model of social license to operate. *Land Use Policy* 69, 266-280.

Luke, H., Evensen, D., 2018. Community narratives of unconventional gas development in Australia, Canada, and the United States, and their effect on social licence, in: Whitton, J., Cotton, M., Brasier, K. (Eds.), *Governing Shale Gas*. Taylor and Francis, Oxon, UK.

Luke, H., Lloyd, D. J., Boyd, W. E., & den Exter, K., 2014. Unconventional Gas Development: Why a Regional Community Said No, a report of findings from the 2012 Lismore City Council election poll and exit-poll survey. *Geographical Research*, 52(3), 263-279.

Lunceford, B., 2012. *Naked politics: Nudity, political action, and the rhetoric of the body*. Lexington Books. Makki, M., 2015. Coal seam gas development and community conflict: a comparative study of community responses to coal seam gas development in Chinchilla and Tara, Queensland.

Malin, S. A., & DeMaster, K. T., 2016. A devil's bargain: Rural environmental injustices and hydraulic fracturing on Pennsylvania's farms. *Journal of rural studies*, 47, 278-290.

McManus, P., Walmsley, J., Argent, N., Baum, S., Bourke, L., Martin, J., ... & Sorensen, T., 2012. Rural Community and Rural Resilience: What is important to farmers in keeping their country towns alive?. *Journal of Rural Studies*, 28(1), 20-29.

McQuarrie, D., 2017, April 24. Honouring the Earth as the sustainer of all life highlights Earth Day event at L'Ancre in Richibucto. *NB Media Co-op*.

Mercer, A., de Rijke, K., & Dressler, W., 2014. Silences in the boom: coal seam gas, neoliberalizing discourse, and the future of regional Australia. *Journal of Political Ecology*, 21(1), 279-302.

- Muradian, R., Martinez-Alier, J., & Correa, H., 2003. International capital versus local population: The environmental conflict of the Tambogrande mining project, Peru. *Society & Natural Resources*, 16(9), 775-792.
- Phadke, R., 2011. Resisting and Reconciling Big Wind: Middle Landscape Politics in the New American West. *Antipode* 43, 754-776.
- Perry, S. L., 2012. Development, land use, and collective trauma: the Marcellus Shale gas boom in rural Pennsylvania. *Culture, Agriculture, Food and Environment*, 34(1), 81-92. Quale, J. (1984) *Belonging: identity and social organisation in British rural cultures* (No. 1). Manchester University Press).
- Rasch, E.D., Köhne, M., 2016. Hydraulic fracturing, energy transition and political engagement in the Netherlands: The energetics of citizenship. *Energy Research & Social Science* 13, 106-115.
- Ricketts, A., 2012. *The activists' handbook: a step-by-step guide to participatory democracy*. London: Zed Books.
- Ruiz-Junco, N., 2011. "Losing Neutrality in Your Everyday Life" Framing Experience and Activist Identity Construction in the Spanish Environmental Movement. *Journal of Contemporary Ethnography* 40, 713-733.
- Sangaramoorthy, T., Jamison, A.M., Boyle, M.D., Payne-Sturges, D.C., Sapkota, A., Milton, D.K., Wilson, S.M., 2016. Place-based perceptions of the impacts of fracking along the Marcellus Shale. *Social Science & Medicine* 151, 27-37.
- Seeliger, L., de Jongh, M., Morris, D., Atkinson, D., du Toit, K., & Minnaar, J., 2016, Chapter 13: Impacts on sense of place values. In Scholes, R., Schreiner, G., Snyman-Van der Walt, L., de Jager, M. (eds.) *Shale Gas Development in the Central Karoo: A scientific assessment of the opportunities and risks*. Pretoria: CSIR. Available from: <http://seasgd.csir.co.za/scientific-assessment-chapters/>.
- Sherval, M., & Hardiman, K., 2014. Competing Perceptions of the Rural Idyll: responses to threats from coal seam gas development in Gloucester, NSW, Australia. *Australian Geographer*, 45(2), 185-203.
- Short, D., & Szolucha, A., 2017. Fracking Lancashire: the planning process, social harm and collective trauma. *Geoforum*.
- Silver, I., 1998. Buying an activist identity: Reproducing class through social movement philanthropy. *Sociological Perspectives* 41, 303-321.
- Sneegas, G., 2016. Media representations of hydraulic fracturing and agriculture: A New York case study. *The Extractive Industries and Society*, 3(1), 95-102.
- Spears, R., 2011. Group identities: The social identity perspective, in: Schwartz, S.J., Luyckx, K., Vignoles, V.L. (Eds.), *Handbook of identity theory and research*. Springer, New York, pp. 201-224.
- Stedman, R.C., 2002. Toward a Social Psychology of Place: Predicting Behavior from Place-Based Cognitions, Attitude, and Identity. *Environment and Behavior* 34, 561-581.

Tajfel, H., 1974. Social Identity and Intergroup Behaviour. *Social Science Information* 2, 65-93.

Towler, B., Firouzi, M., Unterschultz, J., Rifkin, W., Garnett, A., Schultz, H., . . . Witt, K. (2016). An overview of the coal seam gas developments in Queensland. *Journal of Natural Gas Science and Engineering*, 31, 249-271.

Turner, J. C., 1975. Social comparison and social identity: Some prospects for intergroup behaviour. *European journal of social psychology*, 5(1), 1-34.

Turner, J.C., Giles, H., 1984. *Intergroup Behaviour*. Basil Blackwell, Oxford.

Turton, D. J., 2017. Legal determinations, geography and justice in Australia's coal seam gas debate. In S. Graham, A. Lukasiewicz, S. Dovers, L. Robin, J. McKay, & S. Schilizzi (Eds.), *Natural Resources and Environmental Justice: Australian Perspectives* (Vol. 1, pp. 53-67). Clayton, VIC: CSIRO Publishing.

Twigger-Ross, C., Bonaiuto, M., & Breakwell, G., 2003. Identity theories and environmental psychology, in Bonnes, M., Lee, T., Bonaiuto, M. (Eds.), *Psychological Theories for Environmental Issues*. Ashgate Publishing, New York.

Uhlmann, V., Rifkin, W., Everingham, J. A., Head, B., & May, K., 2014. Prioritising indicators of cumulative socio-economic impacts to characterise rapid development of onshore gas resources. *The Extractive Industries and Society*, 1(2), 189-199.

van Veelen, B., & Haggett, C., 2017. Uncommon ground: the role of different place attachments in explaining community renewable energy projects. *Sociologia Ruralis*, 57(S1), 533-554.

Veenstra, A.S., Lyons, B.A., Fowler-Dawson, A., 2016. Conservatism vs. conservationism: differential influences of social identities on beliefs about fracking. *Environmental Communication* 10, 322-336.

Wilber, T., 2012. *Under the Surface: Fracking, Fortunes, and the Fate of the Marcellus Shale*. Ithaca, NY: Cornell University Press.

Willow, A., & Wylie, S., 2014. Politics, ecology, and the new anthropology of energy: exploring the emerging frontiers of hydraulic fracking. *Journal of Political Ecology*, 21(12), 222-236.

Willow, A. J., Zak, R., Vilaplana, D., & Sheeley, D., 2014. The contested landscape of unconventional energy development: a report from Ohio's shale gas country. *Journal of Environmental Studies and Sciences*, 4(1), 56-64.