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Fracking in the Polish press: Geopolitics and national identity

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HIGHLIGHTS

- The general tone of Polish media reporting is positive and emphatic about the benefits of fracking.
- The geopolitical dimension of fracking overrides the technological/scientific dimension.
- The implementation of fracking is constructed as a national priority.
- Opposition to fracking is constructed as counter-normative and “anti-Polish”.
- Representations impede open and constructive dialogue about energy policy.

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ABSTRACT

In a context of resource scarcity and political instability, new energy sources and technologies are being explored in many parts of the world and exploited in some. One of these new energy sources is shale gas and one of the countries seeking to decrease its energy dependence and increase its energy security is Poland which is largely dependent on gas and oil imports from Russia. This article presents the results of a thematic content analysis of articles reporting on shale gas/fracking published in *Gazeta Wyborcza* and *Rzeczpospolita*, two leading Polish newspapers, from 1 January 2010 to 31 December 2012. Findings suggest that in media reporting the geopolitical dimension of fracking overrides the technological/scientific dimension and that representations are overwhelmingly positive. Positive representations are bolstered through particular linguistic framings. It is argued that the Polish press has polarized the debate on fracking in a particular (positive) direction, which has silenced an open and constructive debate concerning energy policy in Poland and constructed criticism of fracking as counter-normative and “un-Polish.” The potential socio-political and policy implications of these media representations are discussed.

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1. Introduction

Energy security and independence have become important geopolitical concerns in the modern world. Novel energy technologies, such as carbon capture and storage (CCS) and geoengineering, are being discussed partly as a means of ensuring CO₂ reduction (Nerlich and Jaspal, 2012, 2013), while at the same time there is also a pressing geopolitical need to find novel sources of energy especially within nation-states, rather than importing them from others.

One novel source of fossil fuel explored in this context of climate change, resource scarcity and security concerns is shale gas, one of a number of unconventional natural gases trapped in

deep geological formations. Shale gas is extracted by induced hydraulic fracturing, or fracking, whereby high-pressure water with additives is used to increase fissures in the shale rock layer and thereby extract natural gas embedded within the layer (see The Royal Society and The Royal Academy of Engineering, 2012). Shale gas is a *natural gas* and is therefore often claimed to have a lower carbon footprint compared to traditional fossil fuels (Engelder, 2011). It is sometimes positioned as a bridging or transitional energy source and is argued to contribute to climate change mitigation. However, debates are emerging about the threat posed by fracking to water resources (Finewood and Stroup, 2012), about large-scale methane leakage (Slezak, 2012), and also about fracking as a distraction from efforts to reduce carbon emissions (Schrag, 2012).

Previous research into representations and perceptions of fracking highlights the controversy surrounding the practice and the socio-political barriers that have impeded its full implementation in some parts of the US and in Western Europe (Jaspal and

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Nerlich, 2014; Jaspal et al., 2014a,b). In this article we want to extend this analysis to Poland, where fracking is being promoted as a viable option for energy security and independence, in contrast to emerging opposition to fracking in several other European countries (Johnson, 2014; O'Hara, 2014). Unlike in other European countries, fracking in Poland is entwined with geopolitics—it has been depicted as a game-changer because it is regarded as a means of liberating Poland from dependence on Russian energy. Therefore, Poland is an important cultural and political context for considering how the debate on fracking is developing in different countries. In the context of CCS, Mander and Gough (2006, p. 6) have argued that “[t]he way in which the media report any new technology can radically affect the success of its implementation—how it is received by the public and other stakeholders as well as decision-makers in government and business”. In this article we explore how the Polish press has represented fracking and the hopes, fears and expectations associated with it.

1.1. Energy policy in Poland

Black and brown coal has historically played a significant role in the Polish economy and in energy production. Black coal has been exported since before World War II and that process was accelerated during the communist era. However, due to the rapid growth in domestic energy consumption, black coal reserves began to decline rapidly. Despite this, in 2006 91% of Polish electric energy production still consisted of brown and black coal. The construction of the first Polish nuclear power station, based on Soviet technology, began in the early 1980s, but was abandoned in the wake of public protests. According to the 2011 Polish Ministry of Economy document,¹ imported gas currently constitutes 13% of Poland's energy demand, of which 80% is imported from Russia.² Over the last 20 years attempts have been made to import gas from other sources (Norway, Azerbaijan), but with limited success. In 2006 the Polish government decided to construct the LNG-Terminal in Swinoujście (North-West Poland) with a view to reducing its reliance on Russian gas imports. In order to further diversify its energy mix, in 2009 the Polish government announced its plan for the construction of a new nuclear plant (Chmielewski, 2013). However, neither of the two projects is complete. Although Poland's energy mix is diverse and the role of gas in this mix is relatively small, Poland remains reluctantly reliant upon Russia for most of its gas imports. Against the historical backdrop of Soviet influence on Poland, the question of Russian gas remains a point of geopolitical contention. Therefore, claims that Poland may have the largest shale gas deposits in Europe induced, at least for a while, a sense of optimism about 'liberating' Poland from Russian gas imports and securing energy independence.³

1.2. Media debates about fracking

In Poland fracking is still an emerging and future-oriented technology which is shaped mainly by hopes and expectations. Since 2011, there have been media reports that Poland may have Europe's largest reserves of shale gas, which could significantly boost the Polish economy, and that the shale gas “treasures” located in Polish territory may “free Eastern Europe from the stranglehold of Russian gas” and thereby safeguard Poland's

energy independence (Evans-Pritchard, 2013). However, it is also noteworthy that in its 2012 report on shale gas the Polish Geological Institute provided only modest estimates of shale in Poland.⁴

As fracking is already underway in the US, where it has largely been represented as a success-story (Wolfgang, 2013), Polish advocates of fracking often point to the US to justify its endorsement of the technology. Although socio-political opposition to fracking has not manifested itself on a scale comparable to that of Western Europe, there have been reports that some Polish villagers believe that shale gas exploration threatens their livelihoods (Materka, 2012). Unlike other European contexts, such as France, which have imposed moratoria on shale gas explorations because of environmental, political and social concerns,⁵ Polish leaders appear to be expediting shale gas exploration in the country (Atkins, 2013; Johnson and Boersma, 2013).

Fracking has attracted increased media attention globally since around 2010. Given that traditional media are still one of the main sources of information flow between policy makers, industrialists and public perceptions of salient issues (Boykoff, 2011), it is surprising that media reporting on fracking has not attracted more empirical attention. Two recent articles outline the social representations of fracking in the UK broadsheet press (Jaspal and Nerlich, 2014) and in online media (Jaspal et al., 2014b). Using thematic analysis, Jaspal and Nerlich (2014) found that in a short space of time, as the socio-political debate on fracking developed, UK media reporting was initially characterized by a period of optimism and subsequently by scepticism. The period of scepticism focused principally upon the constructed risks associated with fracking, such as health and ecological risks. Notions of threat and coping were central to the media debate on fracking. Similarly, Jaspal et al. (2014b) study of representations of fracking on YouTube found that widely-available video clips about fracking focused mainly on environmental risks and economic benefits, but that they also rendered salient issues of human health and well-being.

In this article, we examine the dynamics of the debate on fracking in the Polish press in two major Polish newspaper outlets, namely *Rzeczpospolita*, which is a centre-right and business-oriented broadsheet with regular law-related editions, and *Gazeta Wyborcza*, which is a centre-left broadsheet and was originally the voice of the Solidarity trade union (Ash, 2002). *Rzeczpospolita* is a privately owned newspaper with moderately conservative and nationalistic stance, although it does not overtly favour any particular political party in Poland. Conversely, *Gazeta Wyborcza* is also privately owned but has a social liberal political stance, although it does not overtly support any particular political party. The two newspapers are generally regarded as rivals and, thus, an analysis of both newspapers' coverage of fracking is likely to provide a holistic view of representations of fracking.

During the communist era the press and all media outlets were controlled by the government and were subject to state censorship. However, since the fall of communism in 1989, the free press market has developed rapidly and includes a range of privately owned newspapers and magazines. The Polish constitution, adopted in 1997, guarantees freedom of the press, prohibits any preventive censorship and forbids any licensing requirements for the press (as in the case of the radio and television). Accordingly to Freedom House,⁶ the Polish press scores 25/100 on freedom of expression (with 0 indicating highest level of freedom). There is long-standing recognition amongst communication and media researchers that the press media perform an important agenda-

¹ Polish Information and Foreign Investment Agency, Energy Sector in Poland, http://www.paiz.gov.pl/files/?id_plik=19610.

² International Energy Agency, Energy Policies of IEA Countries, 2011 Review, http://www.iea.org/publications/freepublications/publication/Poland2011_web.pdf.

³ <http://www.economist.com/blogs/easternapproaches/2013/07/shale-gas-poland>.

⁴ <http://www.pgi.gov.pl/en/mineral-resources-en/shale-gas/4744-shale-gas-estimates.html>.

⁵ <http://keepitwatersafe.org/global-bans-on-fracking/>.

⁶ <http://www.freedomhouse.org/report/freedom-press/2012/poland#U7aEkq1dXho>.

setting and opinion-forming function (McCombs, 2005). Indeed, for most society members, the press media constitute a key source of societal information regarding complex science and technology issues (Jaspa et al., 2014a).

1.3. Fracking and geopolitics

The Polish political sphere is dominated by two main political parties, namely Civic Platform (PO—Platforma Obywatelska) and Law and Justice (PIS—Prawo i Sprawiedliwość) (Szczurbiak, 2013). Both parties have their roots in the pre-1989 anti-communist opposition movement, and seek to distance Poland from Russia, economically and politically. Both parties gained their popularity in the early 2000s, when the country was governed by the post-communist Democratic Left Alliance. Civic Platform has been in power since the parliamentary elections in 2007, and its candidate, Bronisław Komorowski won the presidential elections in 2010, succeeding Lech Kaczyński (Law and Justice) who died in 2010. Law and Justice reiterates the need for energy independence from Russia and is a strong supporter of fracking. Civic Platform was not originally opposed to economic collaboration with Russia, although this position has changed in view of the 2014 Ukraine Crisis. Overall, the political landscape in Poland favours moves towards greater energy independence (from Russia).

Poland has long attempted to disassociate itself from its Soviet past and, more recently, from its economic dependence upon Russia (Prizel, 1998). This is not dissimilar to the US where it has, for instance, been argued that shale gas will enable the US to overtake Saudi Arabia as the world's largest producer of crude oil, which will in turn 'liberate' US foreign policy from dependency on oil-rich Arab states (Spencer, 2013). Thus, shale gas can be, and has been, employed as a rhetorical device for safeguarding the distinctiveness of nation-states from their historical and political foes and for accentuating their independence from political and economic outgroups and, thus, their sense of self-efficacy. This is likely to be an especially potent argument for fracking in an era of austerity.

Here the concept of the 'Significant Other' is useful. In her research into national identity, Triandafyllidou (2002) notes that each national group develops its identity at least partially in opposition to outgroups, especially those that have been represented and perceived by national ingroup members as being either threatening or inspiring in some way. Such outgroups are referred to as 'Significant Others' and essentially represent what the ingroup is *not*. Significant Others "condition the ingroup, either because they are a source of inspiration for it, an example to follow for achieving national grandeur, or because they threaten (or are perceived to threaten) its presumed ethnic or cultural purity and/or its independence" (Triandafyllidou, 2002, p. 33). It is reasonable to view Russia as Poland's Significant Other. Accordingly, this article examines Polish press reporting of fracking in the context of geopolitics. We present results of a thematic content analysis of articles reporting on shale gas/fracking published in two major Polish broadsheets, *Gazeta Wyborcza* and *Rzeczpospolita*. We address the following questions:

- How is shale gas/fracking represented in the Polish media?
- What are the main characteristics of the Polish debate on shale gas?
- How does the debate resonate with geopolitical concerns?

2. Methods

Guided by our research questions, we looked for quantitative and qualitative patterns of recurring themes within our corpus.

Thematic analysis has been described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke, 2006, p. 78). Here the method is employed principally in order to examine how fracking is represented in the Polish press.

Rzeczpospolita and *Gazeta Wyborcza* are the two Polish broadsheets with the highest circulation numbers. Searches using the key words 'gaz łupkowy' (shale gas), 'szczelinowanie' (fracking) and 'łupki' (shale) were conducted using the newspapers' respective search engines and the Factiva database (a global information resource, providing full-text access to top national and international newspapers). Preliminary searches indicated that the shale gas first entered the media domain in January 2010. We decided to focus on newspaper articles published between 1st January 2010 and 31st December 2012 because, on the basis of previous media studies of fracking (Jaspal and Nerlich, 2014), we believed that this time frame would provide sufficient textual material for examining changes in media representation. After excluding irrelevant articles, we were left with a corpus of 467 articles (see Table 1). As indicated in Table 1, most articles (69%) were published in *Rzeczpospolita*. The rest of the articles were published in *Gazeta Wyborcza*. The newspaper has local editions in 21 Polish cities and discussed shale gas issues principally in the local news section of the newspaper.

As indicated in Table 2, the articles were mostly published in the economy section of the newspapers—72% ($n=338$); in the local news section—11% ($n=53$); and in opinion pieces—6% ($n=28$).

The Polish-speaking analyst studied the 467 articles in the corpus in order to acquire a high level of familiarity with the broader themes, which were subsequently discussed analytically with the other members of the research team. All authors then discussed initial observations that captured essential qualities, units of meaning and apparent rhetorical techniques within the corpora, focusing upon particular forms of language, categorizations and emerging patterns in the data. These initial codes were collated into preliminary themes, which captured the essential qualities of the articles examined. The preliminary themes were then organized in terms of two superordinate themes, namely (i) Geopolitics and National Politics, and (ii) Framing Hopes and Fears, because they generally converged thematically around these two areas. In the following section, we shall first discuss overarching issues such as the general evaluative tone adopted in the articles. We then explore the geographical focus of the articles, the main actors and the political relations between them. After this

Table 1
Number of fracking-related articles published between 01-01-2010 and 31-12-2012.

Newspaper	2010	2011	2012	Total
<i>Gazeta Wyborcza</i>	15	60	72	147
<i>Rzeczpospolita</i>	26	103	191	320
Total	41	163	263	467

Table 2
Sections of newspapers.

Section	Number of articles
Economy	338
Local	53
Opinion	28
First page	15
News	11
Law	6
"Shale gas"	6
Science	2
Other (e.g. culture)	8

type of scene-setting, we focus on the two superordinate themes that emerged from the analysis.

3. Results

3.1. General tone

The dominant tone adopted by the articles was mainly positive (61%), while neutral and negative tones characterized 23% and 15% of articles, respectively. In 2012, there was a rise in negatively framed articles (50 articles). However, in most articles, the negative tone was used when discussing Polish national governmental or EU policies on shale gas, rather than when discussing fracking as a practice. This was particularly the case in 2012, when the Polish government was criticized for its lack of progress in implementing relevant shale gas legislation. Conversely, there were few articles that were critical of fracking. Thus, in terms of general tone, media reporting on fracking was largely positive, as indicated by these extracts from the corpus:

Exploitation of shale gas is an incredible opportunity for Polish economy.⁷

Just as Internet was a revolution in communication, shale gas has already shaken the energy market in the whole world and it may change its future.⁸

The language of *opportunity* and *hope for the future* was employed in order to promote fracking. Unlike the UK press, which was gradually characterized by scepticism in relation to fracking (Jaspal and Nerlich, 2014), the Polish press presented *positive* social representations of fracking (in 2012 and 2013) and active engagement with the practice was encouraged, rather than discouraged. These representations clearly have an action orientation—namely, to encourage the implementation of fracking in Poland and to remove any obstacles to its implementation.

The generally positive tone of fracking can be explained in relation to the newspapers' focus upon the potential benefits related to shale gas exploitation (see Fig. 1).

Indeed, over 70% of the articles in our corpus focused on the benefits of shale gas (including articles that discussed both benefits and risks). Almost one-fifth of the articles discussed neither risks nor benefits, but mostly discussed the financial or legal aspects of fracking and shale gas explorations. These representations of fracking were anchored to positive economic and social developments in Poland (Moscovici, 1988) and, thus, raised hopes regarding the technology. This reinforced the action orientation of engagement. Potential risks, copiously discussed in the UK press (Jaspal and Nerlich, 2014), were largely attenuated in the Polish press, side-lining potentially negative and psychologically troubling issues.

3.2. Geopolitics and national politics

Most of the articles studied (69%) discussed the question of shale gas and fracking in the Polish national context—they focused on Poland rather than discussing fracking in the US for example (see Fig. 2). These 324 articles reported on the possibility of implementing fracking in Poland and covered various issues, e.g. shale gas exploration, government strategies, critiques of the government or European policy, environmental issues, legislation, and the regulation of activities by (foreign) gas companies in Poland. Poland was sometimes positioned in the context of the

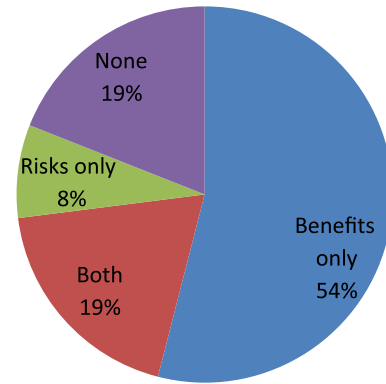


Fig. 1. Benefits vs. risks of shale gas and fracking.

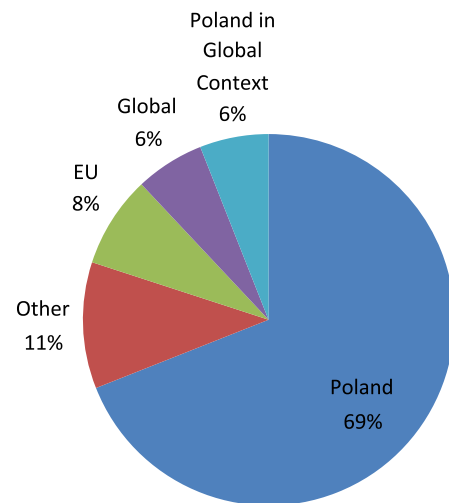


Fig. 2. Geographical focus of articles.

ongoing global debate around shale gas, as well as the geopolitical consequences of further development of this energy source. Like the UK media, the Polish media also constructed the nation as possessing much potential in the domain of fracking and accentuated the role of Poland in becoming a leader in shale gas. This accentuation of national potential has been observed in the media's coverage of other climate change mitigation technologies, such as CCS (Nerlich and Jaspal, 2013).

In addition, 49 articles discussed fracking in the context of other countries—most often the US (18 articles) and Russia (12 articles). There were discernible differences in the ways in which fracking in these national contexts was depicted. The US was represented as a success-story and as an example that Poland should follow:

Cheap shale gas stimulated the American economy and the exploitation of oil from shale has facilitated reduced expenditure on fuel imports, despite the fact that oil is more expensive than before the crisis.⁹

In the UK media, the US was similarly invoked as an example of how Britain might fare in the domain of fracking (Jaspal and Nerlich, 2014). However, the UK press also invoked fracking in the US to substantiate risk representations. By contrast, in the Polish media, invocations of fracking in the US were invariably positive.

Russia was portrayed as hostile country opposed to the exploitation of shale gas in European countries. Consistent with the notion

⁷ *Gazeta Wyborcza*, 20th November 2012.

⁸ *Gazeta Wyborcza*, 7 June 2010.

⁹ *Gazeta Wyborcza*, 26 November 2012.

of the Significant Other, Russia was represented as a malevolent and threatening outgroup opposed to Polish economic wellbeing and prosperity:

So, who is the main enemy of the shale-gas Eldorado? Of course it is Russia, which managed to make many European countries dependent on their gas exports.¹⁰

Poland imports about 70% of its gas from Russia and in the current crisis surrounding Ukraine (March 2014) it is seeking to put into effect legislation for shale gas exploration.¹¹ Just as the Polish press rebuked political inaction, it condemned the alleged attempts of the Russian outgroup, framed as ecologically driven, to curb Poland's economic and social development in the context of fracking:

Under ecology slogans, the pro-Russian lobby is making effort to block shale gas extraction. They are quite effective.¹²

Nine other countries (UK, France, Germany, Ukraine, Bulgaria, Czech Republic, Lithuania, Estonia, and China) were also discussed in the context of shale gas, highlighting the ban on fracking in France and the more positive attitude to shale gas adopted by the British government. The Polish media's invocation of the ban on fracking in France was different from that of the British press—it constructed the French ban as an unfortunate development, rather than as evidencing the risks associated with fracking. This was generally represented as a mistake not to be repeated by Poland.

The political importance of fracking was clearly illustrated by the fact that politicians and government officials were active in the debate around shale gas. The Minister of Economic Affairs, parliament members and European Parliament members themselves authored various articles, in which they emphasized their support for shale gas, highlighted its importance for the Polish economy and indicated their own active involvement in that process—at local, national and international levels. This was especially observable in articles published in 2011, in which questions of safety and risk in the context of fracking were discussed at the European level. Regardless of political affiliation, most Polish politicians expressed support for fracking. Almost unanimous cross-party political support for fracking, clearly manifested in the media, was pivotal in engendering a *hegemonic* social representation of fracking as a positive economic and social development in Poland. By 'hegemonic' we mean a uniform, coercive and consensually shared representation of fracking (Moscovici, 1988).

There were two exceptions to this emerging hegemonic social representation. First, representatives of a left-wing party *Ruch Palikota* expressed (mostly in 2012) their support for anti-fracking activists. However, when questioned by journalists, the party representatives argued that they were not against shale gas/fracking, but rather critical of the ways in which the government and gas companies had dealt with local communities. One of the party members, Robert Biedron stated that:

The Civic Platform [Party] is misleading people, suggesting that we will become another Kuwait. *Ruch Palikota* does not oppose the exploitation of shale gas. However, it is a huge problem in my constituency. Gas companies don't respect the law, they are violating land ownership.¹³

Although there was a call for greater engagement with local communities in order to safeguard their wellbeing during shale gas exploration, statements from this political party were not

necessarily critical of fracking. However, the political opposition did appear to question implicitly the *extent* to which shale gas would be beneficial to the Polish economy (by problematizing the "Poland is the New Kuwait" metaphor), on the one hand, and the potential risks underlying the practice, on the other. Such criticisms had not yet been levelled against the technology and were, therefore, noteworthy. The criticisms could be viewed as contributing to the emergence of a polemic, *counter-representation* to the positive hegemonic representation of fracking.

Furthermore, Włodzimierz Cimoszewicz, an independent left-wing senator and former prime minister indicated, in October 2012, that the government and gas-companies had overestimated the amount of Polish shale gas deposits and that there should be a debate on the scale of Polish investment in the technology. Again, this constituted an attack against the government, rather than the practice of fracking. This constructed fracking as a *political*, rather than environmental, problem. Both of these dissenting voices subtly challenged the emerging hegemonic representation by calling for debate around the benefits and *risks* of fracking. However, these risks were in no way comparable to those invoked in the UK media—these constructed risks in the Polish media concerned community and regulation.

Foreign politicians were also mentioned in the Polish press—especially Obama and Putin. Obama's visit to Poland in May 2011 was frequently referenced in the context of possible US-Polish shale gas collaborations and US investment in Poland. Conversely, Putin was constructed as an enemy of Polish shale gas exploration.¹⁴ Geopolitical aspects of fracking came into focus with references to Obama, largely as a role model to be followed, and Putin as a threat to national wellbeing. As a personification of US success in the domain of fracking, Obama was represented in positive terms with Poland positioned alongside the US, while Putin, as a personification of Russia's obstruction of Polish economic progress, was represented negatively as the outgroup. Moreover, there was discussion of the actual and potential consequences of fracking for global politics and international relations, such as the 'imminent' decline of Middle Eastern hegemony in the energy sector, as has been the case for US media coverage of fracking (Maugeri, 2013).

Other foreign politicians active in this debate were members of the European Parliament. Articles frequently made reference to European institutions (Parliament, Commission), especially after summer 2011, when the question of safety and risks related to fracking entered the European debate. European institutions were often criticized and described as a threat to Poland's interests by Polish media and politicians, including those that usually expressed support for the EU, e.g. *Gazeta Wyborcza*. This clearly demonstrated the geopolitical traction of fracking, and its ability to re-configure the Polish stance on the EU when this organization was not perceived as supporting the Polish aspiration of fracking. EU membership, and affinity to the EU agenda, appeared to decrease in importance in the geopolitical context of fracking—a *national* agenda.

Like the UK media debate on CCS (Nerlich and Jaspal, 2013), there was a discernible shift and interchange between various geographical levels—international, national and regional. Although national NGOs were not very active in the Polish press debate, those who did manifest views on fracking were Polish organizations which were supportive of shale gas exploitation. They criticized the Polish government for its insufficient support for gas companies, its inadequate legislation, and its lack of a coherent shale gas strategy. Like the EU institutions, perceived as an impediment to fracking in

¹⁰ *Rzeczpospolita*, 10 September 2012.

¹¹ <http://www.canadianmanufacturing.com/energy/oil-and-gas/poland-looks-to-reduce-dependence-on-russia-with-shale-gas-law-135422>.

¹² *Rzeczpospolita*, 6 June 2012.

¹³ *Rzeczpospolita*, 25th August 2012.

¹⁴ "Putin pushes Gazprom against shale gas", *Gazeta Wyborcza*, 25th October 2012.

Poland, the Polish government itself was sometimes susceptible to intense criticism in media reporting when it was regarded as lacking the willpower to implement fracking. Consistent with the positive stance on fracking, media reporting tended not to acknowledge social representations associated with anti-fracking activists or environmentalists (e.g. representatives of Greenpeace Poland). This was markedly different from the UK press which provided a more balanced snapshot of the political debate on fracking, providing voice to both supporters and opponents of fracking (Jaspal and Nerlich, 2014).

Politicians emphasized the potential benefits of shale gas exploration for both the national economy and local communities, thereby constructing it as a national agenda and as a bringer of national prosperity. There was discussion of fracking in the context of national politics—in 37 articles (14%). For instance, the issue of fracking was deployed as a rhetorical instrument for undermining and delegitimizing an opposition party, as demonstrated by this article reporting on the presidential campaign of 2010:

PIS [Kaczynski's party] will attack Bronisław Komorowski—during the campaign the candidate of PO [Komorowski's party] has shown his ignorance regarding shale gas. He thought that it is exploited in open-pit mines.¹⁵

Here, fracking was constructed as a technology that national politicians *should* be aware of and, accordingly, a candidate of PO was ridiculed because of his alleged ignorance surrounding the technology. This served to represent fracking as being central to the national and political ethos of contemporary Poland. Fracking was depicted as an emerging ingroup norm, that is, a central aspect of contemporary Polish national identity and, thus, opposition to this norm results in ostracisation. Opponents were positioned as ingroup 'Black Sheep' (Marques et al., 1988).

Community representatives appeared in 22 articles. Most were supporters of shale gas who highlighted their hope that fracking would be implemented so that the local communities could reap the benefits of shale gas. The benefits that community representatives referred to focused on the economic and employment opportunities associated with fracking. Moreover, while the UK media has highlighted tensions between the national and local levels in the context of fracking, the Polish press represented a positive synthesis between the gas companies interested in shale gas exploration (that is, national energy policy) and the local communities who were constructed as eagerly awaiting the implementation of fracking (given the alleged benefits that it would bring to their communities).

Anti-fracking NGOs were only acknowledged in a minority of articles. Most articles contested anti-fracking NGOs' representations by referring to such NGOs as 'lacking knowledge' of fracking, thereby de-authorizing them from taking a (negative) stance on the technology. This served to perpetuate the hegemonic *positive* representation of fracking. For instance, the headline of one article referred to "Peasants against shale gas",¹⁶ which served to de-authorize anti-fracking actors from making credible statements regarding fracking because of their 'peasant' status. Emphasis of this category, rather than their NGO status, served to highlight their lack of knowledge and, thus, credibility vis-à-vis other 'more knowledgeable' actors such as scientists and politicians. Indeed, it has been observed that individuals, groups and institutions may contest social representations that they disagree with by challenging the legitimacy of the disseminators of such representations (Breakwell, 1986). The delegitimization strategy (Bar-Tal, 2000) was similarly deployed in articles which represented anti-fracking NGOs as having 'private interests'

(e.g. they own summer houses in an area where shale exploration may take place), as this too depicted anti-fracking NGOs as being partial, selfish and working in their own, rather than in the national, interest. Thus, anti-fracking NGOs were constructed as *lacking* objectivity. Furthermore, anti-fracking activists were often anchored to the threatening Russian outgroup, spearheaded by Putin, who were depicted as seeking to halt fracking in Poland and, thus, to curtail Polish energy independence.

A similar dynamic was at work when articles discussed topics around policy, regulation and legislation in the context of risk. Interestingly, the focus was generally on the risks that Poland might face if it did not engage in fracking, rather than the potential risks of the practice itself. Discussions of environmental and health risks were not absent from the media, and there were reports that such risks were highlighted by some anti-fracking groups in Poland. However, as highlighted earlier, the social representations of anti-fracking activists were frequently contested and dismissed. Various experts (mostly scientists, but also engineers working for gas companies) questioned the credibility of anti-fracking activists. There was a competition of stakeholders in these articles, whereby scientists and engineers were depicted as knowledgeable and the anti-fracking NGOs as ignorant, obstructionist and even threatening (due to their anchoring to the Russian outgroup). While the anti-fracking activists indicated that the risks associated with fracking called for a review of existing regulation and legislation vis-à-vis fracking, the supporters of fracking insisted that the existing regulation and legislation were sufficient. The latter social representation was attributed more credibility and prominence in most articles.

3.3. Framings hopes and fears

The Polish press manifested pride in Polish shale deposits, its desire for Poland to use them to achieve energy independence, and viewed fracking almost as a national duty—not dissimilar to recent pronouncements by David Cameron in the UK.¹⁷ As highlighted earlier, the Polish press coverage adopted a positive tone and focused on hopes rather than fears. In order to understand the growing socio-political traction of fracking, we decided to examine how these hopes and fears were expressed linguistically.

Those articles that focused on hopes and benefits of fracking constructed it almost as a universal panacea for Poland and indicated that "Shale gas will solve Polish problems." The most important linguistic framing in this context was that of the 'Great Chance,' a chance that, by implication should not be lost or missed. Consistent with the theme of geopolitics and national priorities, this framing highlighted the benefits of fracking but also stressed that the opportunity would expire if not seized instantly. In articles that employed this frame, the future of 'Shale gas Poland' was described as a 'Shale Gas Eldorado'. This hope of a golden future was also expressed through the use of metaphors and comparisons such as: 'At heaven's door'; 'The Golden Age of Shale Gas'; 'Pomerania is like Qatar' 'Poland is the new Kuwait'. The following quotes exemplify this type of framing focusing on shale gas as a great chance for Poland:

There is a real chance to generate substantial income for the state and companies, for many new job places, for a political independence and a real change of our geopolitical situation. This is probably the biggest economic and political chance in the last twenty years—after the accession to the EU and NATO.¹⁸

¹⁵ Gazeta Wyborcza, 25th June 2010.

¹⁶ Gazeta Wyborcza, 8th October 2011.

¹⁷ <http://www.telegraph.co.uk/earth/energy/fracking/10723294/David-Cameron-on-Britain-has-a-duty-to-frack.html>.

¹⁸ Rzeczpospolita, 23rd March 2012.

[W]e have a reasonable chance of becoming an important shale gas producer. It is also a chance for developments in other branches of this industry. It means that shale gas can be a source of income for local authorities and new jobs can be created. It is also a chance for universities.¹⁹

Fracking was consistently constructed superlatively as ‘the chance.’ which highlighted the unprecedented opportunities it could provide for job creation, educational policies and other key national concerns. A number of other positive frames reinforced this representation of hope, i.e. ‘Things are happening,’ ‘Shale gas revolution’ or ‘Together for shale gas’. These frames and the ‘Things are happening’ frame constructed optimism about the future. Journalists stressed that shale gas ‘is here’, companies are searching for companies ‘right now’ and potential benefits are almost here, e.g.: “Shale gas may be available on Polish market as soon as the turn of 2014 and 2015.”²⁰; “We have shales!”,²¹ “It’s time to begin the Great Drilling”.²² This constructed a sense of imminence in the implementation and, crucially, *success* of fracking in Poland, and also reflected the type of language that has been used in the context of biotechnology, which mobilizes the future into the present, thereby attempting to create a better future (Brown, 2003).

Articles in the corpus indicated that, in order to achieve this future now, there was a need for national unity. The ‘Together for shale gas’ frame encourages Polish politicians, business, local communities or scientists to unite in their ‘fight’ for Polish shale gas. This was expressed in newspaper headlines such as: ‘Polish giants are going together for shales,’ ‘Shale gas across the political divisions,’ ‘A shale alliance in Pomerania’. This was also observable in an editorial published in *Rzeczpospolita* in March 2012, in which the journalist stated:

There is a very difficult task confronting our political class. This is not a clean business. This is great business and great politics. It will be decisive for Poland’s future economic and geopolitical issues. Therefore we should appeal to the politicians from both sides [of the political scene] not to turn shale gas into an issue to fight over. This is a matter for the entire nation—a great chance for Poland, for which we should suspend our fights.²³

The fight referred to in this extract functioned at various levels, most notably in opposing the anti-fracking factions both at the national and EU levels. The EU, as a perceived opponent to Polish shale gas, was mostly constructed as posing a potential threat to the national vision for the future. Many articles (especially in 2011) covering proposed European regulations of fracking were framed using the ‘Threat to our shale gas’ frame. The use of this frame increased each year, which could be attributed to both the ongoing debate in Europe and emerging scepticism regarding fracking in Poland. The ‘threat’ frame was directly linked to the ‘unite in the fight for shale gas’ frame.

The perceived sources of this threat to Polish shale gas were European institutions, environmentalists, various lobbying groups and most of all Russia (i.e. Russian government and Gazprom). Simultaneously, articles highlighted two main supporters of shale gas exploitation (at the international level), namely multinational gas companies and the US. One journalist called this the ‘Great Game’ around shale gas (‘Ukraine plays shale-poker’; ‘The gas-game’; ‘The most important Polish game’; ‘It’s just the beginning on our way for the gas wealth’). The use of ‘Great Game’ metaphor

was consistent across the time-period studied, although it was more popular in 2011. This clearly referred to a game Poland wanted to win, not only in order to gain energy independence but, more generally, (economic) freedom from both Russia and Europe. In the context of this frame, and the US–Russia distinction, the ‘Agent of freedom’ frame (‘The dawn of energy freedom’; ‘The end of the spheres of influence’) is noteworthy. Shale gas was often framed as an ‘agent of freedom’ that would allow Poland to gain energy independence from Russia. By contrast, anti-fracking entities were seen as opposing such freedom and, thus, as a threat.

Discussions around the possible environmental consequences of fracking, European regulations, news of gas companies withdrawing from further investments in Polish shale gas, as well as slow pace of implementing Polish regulations of the shale gas market, resulted in the growing use of negative frames, such as the ‘We may lose it’ frame (e.g. the headline ‘Big gas-defeat’). There was a shift from a representation of hope linked to a representation of threat (namely, if we do not exploit shale gas fast we will miss out on a better future) to a representation of caution and even despair (namely, we may not be able to exploit shale gas as fast as we thought and we actually may miss out on a better future). This highlighted the urgency of implementing fracking before it is too late.

4. Discussion

Findings show that media reporting of the technology was overwhelmingly positive. The emerging positive representation was uniform, coercive and consensually shared in that there were few differences in the representational tendencies of the two largest Polish broadsheets studied, despite their ideological differences. Accordingly, it is possible to talk of a *hegemonic* positive social representation of fracking in the Polish press.

4.1. Maintaining the positive social representation of fracking

The press coverage was characterized primarily by references to the economic, national and social benefits that fracking would bring to Poland. Most of the actors (politicians, business people, scientists, journalists) expressed their support for the technology. Poland was portrayed as having rich deposits of shale gas and, thus, fracking as an unquestionable success-story waiting to happen. There appeared to be a certain naiveté regarding the process of generating shale gas, as well as the potential risks associated with fracking which were very rarely acknowledged. Rather, there was a euphoric celebration of Poland’s national self-efficacy due to its alleged shale reserves and one of the key purported benefits was for Polish economic security and independence.

When the potential risks were (peripherally) outlined in articles, they were frequently qualified by information to suggest that the benefits vastly outweighed the costs and that the practice of fracking should, therefore, be implemented. Similarly, in the UK media coverage of CCS (Nerlich and Jaspal, 2013), the technology itself was rarely discussed, especially not its three technical components: carbon, transportation and storage. The economic, political and social aspects of implementing CCS constituted the focus of media coverage, which obscured the potential technological difficulties. Likewise, the Polish media debate on fracking is characterized principally by economic and political concerns. There is little discussion of the scientific, technological and practical aspects of fracking. By focusing on these aspects of the fracking, rather than technological aspects which could be contested, the press is able to construct and maintain a positive representation of the practice. Crucially, the pervasiveness and coerciveness of this representation in the media may mean that it will be unanimously and uncritically

¹⁹ *Gazeta Wyborcza*, 12th December 2012.

²⁰ *Rzeczpospolita*, 9th September 2011.

²¹ *Gazeta Wyborcza*, 7th August 2011.

²² *Rzeczpospolita* 15th June 2010.

²³ *Rzeczpospolita*, 12th March 2012.

accepted by the Polish public. Indeed, a survey carried out by the Public Opinion Research Center, CBOS in September 2011 indicated that 73% of Polish respondents were in favour of shale gas exploration in Poland, despite the potential risks associated with fracking, with only 4% of respondents opposed to it (Rutkowski, 2013).

The hegemony of the positive social representation of 'Polish shale' appears already to have rendered any critical discussion of fracking increasingly difficult—those participating in the debate are unable to question the feasibility of fracking in Poland and to do so amounts almost to an act of 'national treason' given its constructed centrality to the Polish national ethos. Indeed, groups and institutions raising concerns about fracking were habitually positioned as either deliberately obstructionist or ignorant and, thus, in no position to criticize fracking. This was made possible by constructing fracking as a quintessentially *national* concern given its alleged benefits for the future and wellbeing of the Polish nation (Prizel, 1998). Anti-fracking activists and entities (both Polish and foreign) were, accordingly, represented as jeopardizing this aspect of ingroup identity. The conflation of Polish anti-fracking activists with the threatening Russian outgroup constituted a powerful means of silencing dissent, as it positioned ingroup members alongside 'them' and, thus, in opposition to 'us'.

Attempts to question positive representations of fracking were met with condemnation. There was only one Polish political party *Ruch Janusza Palikota* which subtly expressed doubts about fracking in Poland. However, this stance was criticized by the political opposition and by the press. Consequently, politicians from *Ruch Janusza Palikota* issued several statements denying that they had contested fracking per se and that their position had been 'misunderstood' by the media. They reiterated their support for fracking, while condemning the *government's handling* of shale gas exploration. Thus, the critique of fracking appeared to be 'off-limits' given its growing centrality to the Polish national ethos and could, therefore, be used almost as a rhetorical weapon for delegitimizing political opponents. The only discernible critique in our corpus focused not on the principle of exploiting Polish shale gas, but rather on some legal and bureaucratic aspects of this process. Although the social representation that fracking poses potential risks to the environment was occasionally acknowledged, it was often contested by journalists who claimed that protesters were in fact only worried about the natural environment when it affected their own assets or interests. This served to delegitimize those voicing such concerns because it constructed them as acting out of personal gain, rather than in the nation's interest.

Anti-fracking activities in Poland and abroad met with strong opposition. The press usually questioned the credibility, knowledge or trustworthiness of anti-fracking activists. Some articles in our corpus suggested that anti-fracking activists were colluding with threatening outgroups, such as the Russians, which served to minimize their credibility. This implicitly constructed anti-fracking activists as ingroup 'Black Sheep' (Marques et al., 1988) who were disloyal to the Polish national ingroup. Shale gas was consistently described as a historic opportunity for positive change and that it will provide both economic and political independence (from Russia). Therefore any individual or organization questioning fracking was automatically positioned as threatening Poland's development and, thus, implicitly as an 'enemy.'

This study demonstrates that multiple actors were generally united in their defense of fracking. In the early media coverage, the unity of these actors in the context of fracking was principally economic and organizational in nature. Groups and organizations collaborated to accelerate shale gas exploration in Poland and to convince people of its long-term advantages. However, during the later stage of the debate a new form of unity emerged in the media—these actors united in their opposition to the emerging anti-fracking lobby. Although none of the anti-fracking lobby's arguments were

accorded any credibility, the lobby itself was acknowledged and positioned as a threat within. There was a desire to protect Poland's shale gas program, and politicians were often constructed as safeguarding Poland's interests by supporting fracking. Poland's interests were most notably protected at an international, geopolitical level.

4.2. Positioning Polish shale gas in geopolitical contexts

Our analysis demonstrates that geopolitics and intergroup relations clearly play a prominent role in media reporting on fracking. Social psychology provides useful insights into the interrelations between Polish media reporting on fracking and geopolitics. This interaction and interplay with Significant Others, which in social psychology are defined as outgroups that are viewed as being either threatening or inspiring in some way, was clearly observable in media reporting on fracking. The US and Russia appeared to be constructed as Poland's Significant Others. The US was consistently represented as a positive actor and Poland was, accordingly, positioned alongside the US in the context of fracking. President Obama, as a personification of the US, was represented positively as a supporter of Polish energy and economic aspirations and, thus, as an 'inspiring' outgroup to be followed. In short, for Poland to realize its full economic potential, it would need to follow the US in implementing fracking.

Conversely, Russia was consistently positioned as a political and economic outgroup and as a malevolent actor attempting to *impede*, rather than facilitate, Poland's engagement with fracking. As a major gas exporter, Russia was constructed as a natural enemy of Polish shale gas, which itself was represented as a central aspect of Poland's national ethos. Thus, the Russian outgroup was constructed as posing a threat to Poland's economic and social wellbeing. Given that some internal opponents of fracking were conflated with the Russian outgroup, they too were delegitimized as 'foreign agents' whose principal aim was to serve Russian, rather than Polish, interests. For instance, some actors suggested that the reason for ExxonMobil's decision to withdraw from further shale gas exploration in Poland was its collaboration with (and, thus, implicit influence from) Russian gas companies. Thus, Russia was consistently represented as posing a negative challenge to Poland's aspirations and challenged the nation's independence.

The Polish media debate on fracking also demonstrated the changing intergroup dynamics between Poland and the EU (Cordell, 2000). It was interesting to observe that *Gazeta Wyborcza*, which traditionally espouses a traditionally pro-EU stance, overtly criticized EU policy in the context of shale gas. Moreover, France, as a fellow EU member, was rebuked for its ban of fracking, which was regarded as being both shortsighted and reactionary. As a perceived opponent of Polish shale gas, the EU was widely described as posing a threat to Poland's economic plans and, thus, there was an observable conflation of Russia and the EU as an economic threat. Given the centrality of fracking to the Polish national agenda and the constructed national 'duty' of supporting it, it is possible that this will ultimately re-shape intergroup relations with EU if the organization is perceived as an impediment to Poland's realization of its hopes regarding fracking. The debate on fracking has already marked a significant change in representational tendencies vis-à-vis the EU—originally, the EU was represented as a supporter of democracy and of Polish economic and social development, but in our corpus it was increasingly represented as an irresponsible organisation under excessive influence from anti-fracking lobbies. In addition to the environmental and social aspects of fracking, it is clearly important for researchers to monitor its *geopolitical* aspects and consequences given the vast shifts in media representations of the various institutions, outgroups and Significant Others associated with the Polish state.

5. Conclusions and implications

Our analysis shows that fracking has become a prominent topic in the Polish press, compared, for instance, to the media debates on biotechnology, nanotechnology or nuclear energy which attracted relatively less media attention (Lemańczyk, 2013). The coverage is overwhelmingly positive and the hegemonic representation of fracking suggests that it will solve all of Poland's economic and political problems and actively bolster the future and wellbeing of the country. To contextualize this study in emerging theory and research which attempts to link environment/energy with human identity (Jaspal et al., 2014a,b), it is plausible to hypothesize that the positive social representation of fracking which is disseminated and encouraged in the Polish press would have favourable outcomes for people's sense of continuity, self-esteem, self-efficacy and distinctiveness. These are important principles of identity and are likely to contribute to how people view fracking and how they subsequently respond to it socially and psychologically (Jaspal and Breakwell, 2014). Consumers of the Polish media will plausibly feel better about their Polish national identity, more empowered as citizens of a country with 'immense' shale gas reserves, less dependent on 'malevolent' outgroups, and more able to continue to live their lives, despite global fears about growing energy *insecurity*. It is, therefore, likely that people will manifest little opposition to the emerging positive representations of fracking in the Polish press.

While positive representations of fracking may well be beneficial for identity processes, the technology must be debated in a responsible and inclusive manner with both the benefits and the risks openly and actively outlined and discussed by various stakeholders. All of the potential scenarios – both positive and negative – need to be debated. The scientific and technological elements – both positive and negative – should be acknowledged. The cost implications – favourable and unfavourable – should be borne in mind. However, it appears that the Polish press has polarized the debate on fracking in a particular (positive) direction and, thus, may silence open and constructive discussion of the technology and its implications for Polish society. The construction of anti-fracking as un-Polish and, worse still, as a Russian agenda may be an obstacle to voicing concern about fracking. This may also impede the development of a responsible and politically sound energy policy in Poland, as, ideally, policy should be developed within a context of transparency and critical debate involving multiple actors—scientists, politicians, companies, academics and, perhaps most importantly, communities. We hope that this article will encourage further research and insight into the social, geopolitical and psychological aspects of fracking as it continues to be seriously envisaged in a growing number of geographical contexts.

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