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# fracking – what’s the stories?

**Peter Jones, Daphne Comfort and Alex Lee** look at how two actors on opposing sides of the debate on shale gas extraction through fracking have used ‘stories’ posted on the internet to promote their respective positions

Storytelling – simply defined as the cultural activity of sharing and interpreting experiences – is as old as the human race, and has traditionally been used to share, and pass on, knowledge, values, myths, legends, fables and religious beliefs from one generation to another and across geographical space. Osman, for example, has argued that ‘transcending barriers of language and culture, storytelling is one of the oldest art forms in history utilised to transmit cultural, moral and complex information in a simple, engaging and memorable manner’,<sup>1</sup> and PricewaterhouseCoopers has claimed that ‘storytelling is one of the most powerful tools available to effective communicators’.<sup>2</sup>

Stories have traditionally been told in a variety of ways, including pictures and photographs, messages, conversations, letters and presentations, but the internet and digital technology increasingly facilitates storytelling in innovative new ways, and the internet has been described by the author Neil Gaiman as ‘a new version of oral storytelling’.<sup>3</sup>

While stories inform and illuminate all walks of life, van Hulst claimed that ‘interest in storytelling in planning has grown over the last two decades’.<sup>4</sup> Sandercock, for example, has emphasised ‘the importance of stories and storytelling in planning practice’,<sup>5</sup> and van Hulst has argued that ‘storytelling is seen as an important tool in planning practice’.<sup>4</sup> More specifically, van Hulst suggested that ‘through telling and listening to stories, actors in the present not only make sense of the past, but also prepare for the future’, and that ‘stories that can be found in planning processes will, therefore, often contain explicit ideas about future events and the role of various actors in bringing them about’.

That said, the vast majority of the cited research into storytelling in planning has been undertaken in mainland Europe, for example in the Netherlands and Denmark, and in North America. While Manuel *et al.*<sup>6</sup> worked with neighbourhood planning groups in the North East of England to capture their stories

with video technology, little work has been published to date on the role of storytelling in local authority planning within the UK.

In the last few years the hydraulic fracturing of shales to produce gas, popularly known as fracking, has become one of the most fiercely contested planning issues in the UK.<sup>7</sup> With the foregoing thoughts in mind, this article explores how two sets of opposing actors, namely Cuadrilla Resources (subsequently referred to as Cuadrilla), one of the principal shale gas companies in the UK, and Frack Off, a grass-roots direct-action campaign which aims to stop the extraction of shale gas resources in the UK, have employed stories posted on the internet to promote their respective positions on fracking.

## Storytelling and planning

Over a quarter of a century ago, Throgmorton claimed that ‘good planning is persuasive storytelling about the future, and that planners are future-oriented storytellers who write persuasive texts that other people read (construct and interpret) in diverse and often conflicting ways’.<sup>8</sup> More specifically, he analysed the conflicts surrounding the Commonwealth Edison Company’s unsuccessful nuclear power plant construction programme in the 1980s. This analysis concluded that the company ‘failed to persuade the Illinois Commerce Commission and others because the company’s story had crucial weaknesses in plot, point of view, and character development’.

A decade later, Throgmorton revisited his claim that planning can be thought of as a form of persuasive storytelling about the future, to respond to criticisms of, and to revise, his original thesis. Among these revisions was a recognition that: ‘powerful actors will strive to eliminate or marginalize competing stories and that those powerful actors will induce some planners to devise plans (stories about the future) that are designed to persuade only a very narrow range of potential audiences’.<sup>9</sup>



**Film-making has been used in local storytelling as 'a means of provoking public dialogue around planning and policy issues'**

Sandercock argued that 'story has a special importance in planning that has neither been fully understood nor sufficiently valued'.<sup>5</sup> More specifically, she suggested that story is used in a variety of ways within planning, and claimed that 'a better understanding of the work that stories do can make us better planners in at least three ways: by expanding our practical tools, by sharpening our critical judgment and by widening the circle of democratic discourse'. Sandercock and Attili argued<sup>10</sup> that new information and communication technologies provide an opportunity to explore storytelling through video and film-making. Here the authors employed film-making as 'a means of provoking public dialogue around planning and policy issues' in Vancouver.

Van Hulst identified two strands of research: storytelling as 'model for the way planning is done'; and storytelling as 'a model for the way planning could or should be done'.<sup>4</sup> In addressing the former, for example, he suggested that 'planning practice is much like telling stories' and 'storytelling is fundamental to planning', and that 'actors in practice tell stories and that this activity is an important aspect of planning'. He drew on empirical research in the anonymously named 'Heart-less Town', in the Netherlands, to identify a range of 'practice stories' and concluded that 'although storytelling can be used explicitly to make planning more democratic, it is already in use politically to persuade decision-makers and audiences and simultaneously draw the attention away from alternatives'.

More generally, Mäntysalo *et al.* suggested that within strategic urban planning 'scenario stories take the form of development paths that stretch, step by step, from the historical trends and the present situation towards possible futures'.<sup>11</sup> Eckstein and Throgmorton explored the role of story in planning theory and practice,<sup>12</sup> with the goal of creating US cities that aim to balance competing claims for economic growth, environmental health

and social justice. Hillier used stories from planning practices to demonstrate how:

*'local planning decisions, particularly those which involve considerations of issues of public space, cannot be understood separately from the socially constructed, subjective territorial identities, meanings and values of the local people and the planners concerned.'*<sup>13</sup>

In suggesting that 'a good city tells a story', Vaananen<sup>14</sup> claimed that stories about the history and the name of Jatkasaari, a former port area on the seashore of Helsinki, which is being developed as a new residential area for 17,000 inhabitants, are guiding planning in, for example, the form of types of buildings and transportation links. More pessimistically, in exploring the use of storytelling as contemporary tool of urban planning Mager and Matthey suggested that:

*'just as storytelling is supposed to have led democratic communication off track though a pronounced concern for a good story, storytelling applied to the field of urban production may have led to an increasing preoccupation with staging and showmanship for projects to the detriment to their real inclusion in political debate.'*<sup>15</sup>

### **Frame of reference**

The UK government believes that the recent discovery of large-scale shale gas reserves under many parts of the UK 'has the potential to provide the UK with greater energy security, growth and jobs',<sup>16</sup> although more recent leaked reports suggest that the government has scaled back its expectations of the pace and scale of shale gas development.<sup>17</sup> Shale gas is produced by hydraulically fracturing shales, a process popularly known as fracking, which releases the gas and allows it to flow. This process typically involves drilling a borehole down into the earth and then using a mixture of water and chemicals, pumped at high pressure into the shale,

to open up narrow fractures, which in turn creates paths for the gas to flow into the borehole and hence back to the surface.

The commercial development of these resources involves two distinct stages: the exploration phase and the production phase. The exploratory phase involves the drilling of a small number of wells to obtain core samples from the underlying shale formation. If the commercial viability of a shale gas resource is established, then companies may apply for permits and planning permission for commercial production.

Within the UK jurisdictions, government policy towards fracking varies. In Scotland, for example, there is currently an effective moratorium on fracking, while in May 2018 a House of Commons Written Statement from Greg Clarke, Secretary of State for Business, Energy and Industrial Strategy, announced that developers would be able to drill test sites in England without applying for planning permission, and that local planning authorities would be given £1.6 million to speed up fracking applications.<sup>18</sup> The Written Statement also announced that in the summer of 2018 the government would consult on the criteria required to trigger the inclusion of shale production projects into the nationally significant infrastructure projects (NSIPs) regime.

Nevertheless, in England and Wales proposals for shale gas exploration and extraction are currently subject to the requirements of the 1990 Town and Country Planning Act, administered by the minerals planning authority for the area in which the development is located. Development pressure for the detailed exploration, and possible production, of these reserves has prompted political controversy, and fracking has become one of the most fiercely contested sets of contemporary planning issues facing local planning authorities.

The authors reviewed some of the stories seen to be central to these controversies by undertaking a snapshot review of the stories on the Frack Off 'Fracking threat to the UK' webpage<sup>19</sup> and on the Cuadrilla 'Video gallery' webpage<sup>20</sup> on 4 and 5 July 2018. Unless specifically cited, all material and quotations in the remainder of this article are drawn from these two websites.

While this approach can be seen to be a selective, rather than comprehensive way of capturing stories, it has been adopted by other scholars interested in fracking. Hopke and Simis,<sup>21</sup> for example, explored discourse over hydraulic fracking and the shale industry on social media, and over a two-week window Hopke<sup>22</sup> examined how Global Frackdown, an environmental movement, called for a ban on fracking which was centred on a transnational day of action, via social media. More generally, Grundy has argued that fracking lends itself well to storytelling.<sup>23</sup>

## Frack Off webpage

Frack Off, which describes itself as an 'Extreme Action Energy Network', was founded 2011 in Lancashire with a banner drop from Blackpool Tower and the launch of its website. The network's position is that:

*'fracking is a nightmare! Toxic radioactive water contamination, severe air pollution, and tens of thousands of wells, pipelines and compressor stations devastating our countryside and blighting communities. All this to produce expensive gas that will soon run out using a process that directly accelerates climate change.'*

The Frack Off 'Fracking threat to the UK' webpage offers a range of material which summarises opposition to fracking and provides a portal to the network's various other websites. The material includes the network's position on fracking cited earlier, short features on 'extreme energy', 'unconventional gas', 'impacts of unconventional oil and gas', 'climate catastrophe' and 'the fracking timeline' – which is a call to mobilise opposition to fracking operations, a map of fracking sites within the UK, a video clip entitled *Fracking Hell: The Untold Story*, and a schedule of 'upcoming events'.

The material on 'extreme energy', for example, argues that 'fracking is just a symptom of a much wider problem. As easier-to-extract energy resources are exhausted by the unsustainable energy consumption of the present system, we are resorting to ever more extreme methods of energy extraction', which in turn leads to 'increasing pollution, more dangerous working conditions, greater greenhouse gas emissions, more land use and less resources available to other sectors of society'. The impacts of fracking listed on the webpage include the volume of water used in fracking, contamination of groundwater, air pollution, and the generation of 'vast streams of toxic and radioactive waste' which are 'a nightmare to dispose of', while 'attempts to get rid of this waste by injecting it into the ground are causing large numbers of earthquakes'.

In addressing 'climate catastrophe', Frack Off claims that:

*'at a global level, there are already far more conventional fossil fuel reserves than we can afford to burn without causing catastrophic climate change. As with all unconventional fossil fuels unconventional gas simply adds to this store of unburnable carbon. Widespread exploitation of unconventional fossil fuels could produce enough carbon dioxide to make the planet literally uninhabitable.'*

That said, Frack Off suggests that: *'while all this may seem very bleak, there are rays of hope within this dark cloud. Unconventional fossil fuels are much more dispersed than*



**An anti-fracking protest gathering outside the town hall in Preston**

*conventional ones, meaning that in order to get them many more communities are affected but must at least passively consent to their extraction. If these communities get organised to resist this invasion then it can be stopped.*

The 'fracking timeline' employs a series of computer-generated images to help describe the stages in the fracking process, from licensing, through surveying, land acquisition, planning application, drilling and appraisal to production, and advises 'if you want to take action, start planning an effective Anti-Fracking campaign where you live: Get our materials and step-by-step guides'. At the time of writing the first of the 'Frack Off Guides', entitled *Start a Community Group In Your Area*, was advertised on a linked webpage. This guide was described as containing 'a series of community action guides, resources and a DVD of films designed to help you start/develop an anti-fracking community group in your area.'

The Frack Off webpage also contained links to more detailed information on the impacts of fracking, recently established local groups, full details of forthcoming activities and news of 'active blockades'. In providing details of 'Black Friday @ Preston New Road', one of the early fracking sites in Lancashire, on 6 July 2018, the message was:

*'it's being suggested that, in addition to keeping the regular – and successful – Green Mondays and White Wednesdays, we also start building*

*regular Black Fridays. Whilst the White Wednesdays will remain as non-action 'Call for Calm' days, it's hoped that both Green Mondays and Black Fridays will now become the main 'action' days.'*

At the same time, Frack Off advised 'attendance does NOT mean anyone will be under any pressure to do anything other than bear witness to Cuadrilla's climate crime at Preston New Road'.

A further link provided details of the 'Preston New Road Community Fracking blockade'. Furthermore, Frack Off reported that:

*'In January 2017 contractors working for Cuadrilla Resources moved in on land where it has permission to construct the largest fracking development in the UK. Cuadrilla have constructed an access road and a large frack pad on fields north of Preston New Road and are now drilling two horizontal shale wells. Local communities are massively opposed to this invasion, which has been forced through by central government, and are mobilising to resist.'*

### **Cuadrilla video gallery**

Cuadrilla, a privately owned exploration and production company founded in the UK in 2007, is 47% owned by AJ Lucas, an Australian engineering company, 45% owned by Riverstone Holdings, a private equity company, and 8% owned by the

company's employees and former employees. The company is focused on discovering and recovering natural resources, primarily natural gas, from shale rock. At the time of writing, in July 2018, the company had onshore exploration licences in the North and South of England covering some 240,000 hectares. At that time, Cuadrilla had eight operational sites in its Lancashire Bowland shale gas exploration licence area and reported its belief that 'at least 200 trillion cubic feet of natural gas is trapped in the shale rock in our licence area'.<sup>24</sup>

Cuadrilla's video gallery contained 23 video clips, with running times of between 48 seconds and 58 minutes and was prefaced with the invitation 'have a watch to find out more about what we do'. The video clips covered a range of themes, including exploration geology and the Bowland shales, the characteristics of hydraulic fracturing, geophysical and seismic surveys, site lifecycle, visual impact, environmental protection, working on site, and public relations within the community. In the video clip entitled *Cuadrilla Rockstars*, two of the company geoscientists emphasise that exploration geology is at the heart of what the company does as they visit a number of sites and sample rock formations on the surface of the Bowland basin.

The *Hydraulic Fracturing, Site Lifecycle and Well Design* clips rely on computer-generated sequences, with voiceover, to tell their stories. The first describes hydraulic fracturing as 'the temporary processes carried out after drilling a well to help the gas flow out', and outlines how a rig site is assembled, the nature and timescale of the exploration process, and how non-hazardous waste water is removed from the site and taken to a waste treatment facility. It emphasises how the operations are closely monitored at and below the ground surface to check for any seismic activity.

The *Site Lifecycle* clip gives the average size (namely 1.5 hectares) of an exploration site and outlines the processes of soil removal, the laying of an impermeable membrane to provide a surface seal and a layer of compacted stones to provide a temporary surface, the delivery and erection of the drilling equipment, the screening of the site, the monitoring of drilling operations, the subsequent testing which employs fracturing, and site restoration.

In the *Natural Gas, What's Fracturing, Microseismic Survey* and *Geophysical Survey* clips, the voices of some of the company's senior geoscientists accompany a number of simple animated graphics. These outline the way that natural gas accumulates over geological time; the drilling and fracturing process; how the direction and extent of fracturing below the ground surface can be assessed; and the process of surveying the geological strata using energy waves generated at ground level. An animated video clip explains how advances in drilling technology – namely the ability to drill horizontally as well as vertically –

would reduce the visual impact of hydraulic fracturing operations within the UK, as compared with those associated with earlier developments in the US.

Five video clips, all entitled *Preston New Road* and all hosted by Jim Hancock, former Political Editor at BBC North West, were filmed at one of the company's drilling sites near Blackpool and originally broadcast live in October, November and December 2017 and in February and March 2018.

In the first of these clips, Jim Hancock describes Cuadrilla as 'a Lancashire-based company specialising in the search for the hydrocarbons we need to keep our homes warm and industry going' and says that the aim of the video is to 'tour the site, see what's going on, bust a few myths and answer any questions you may have'. The first part of the clip, for example, focuses on environmental protection measures introduced on the site, and includes a number of selected questions submitted by members of the public. These questions cover the number of tanker visits to remove waste water, risks associated with silica sand used in the hydraulic fracturing process, radioactive contamination from the shales, air quality, and methane leaks. In his response to these questions the company's Well Services Director looks to allay concerns by outlining specific measures undertaken to protect the environment.

In *Life on the Rig*, one of the company's rig managers and its Chief Operating Officer provide a number of illustrations of working on site, with particular emphasis on the measures to ensure a safe working and operating environment. The company's employees also stress the variety of the work, and the excitement of being involved in the search for new gas resources, company support, the positive work ethic fostered by the company, the importance of team working, training employees to work with the specialist equipment, and recruiting employees from the local area.

Commitment to the local community and economy features prominently in the March 2018 *Preston New Road* video mentioned above, and it is also the theme of four other video clips. In the former, Jim Hancock interviews a member of the Lancashire for Shale organisation, which is looking to encourage local businesses to prepare for the opportunities that the commercial development of shale gas could bring to the area. Francis Egan, Cuadrilla's Chief Executive Officer, features in two contrasting video clips which highlight the company's investment in the community. One of the clips is based at AFC Fylde, where the company funds the Train like a Pro soccer development programme for local children between the ages of 8 and 12. The second clip focuses upon the company's support for the Young Engineer Competition held at Lytham Saint Anne's High Technology College. More generally, a number of the video clips carry the message 'Cuadrilla – Putting Lancashire First.'

## Reflective commentary

The review of the material posted on the internet by Frack Off and Cuadrilla suggests that both organisations believe that storytelling has an important role to play in bringing the debates about fracking into the public realm, in gathering support, and potentially in influencing local planning decisions. That said, a number of issues merit reflective commentary.

The Frack Off homepage and the Cuadrilla video gallery undoubtedly present two very different sets of stories about fracking. On the one hand, for example, Cuadrilla consistently framed its specific local operations in a wider national context by emphasising the importance of its work in seeking to harness shale gas resources to help to meet the UK's domestic and commercial energy requirements. On the other hand, Frack Off effectively employed a global perspective to set the context for its local opposition to fracking by emphasising that the commercial exploitation of shale gas by fracking was part of the wider problem of pursuing the development of unsustainable energy consumption policies.

As such, Frack Off might be seen to be fundamentally opposed to the current dominant capitalist global business model while Cuadrilla sees its proposed operations as contributing to current UK economic policy. In a similar political economy vein, Cuadrilla might be seen to reflect the claim by de Leeuw *et al.*<sup>25</sup> that 'stories become calculated devices to corral the thinking of large groups' and to reflect the 'increasing use of storytelling for corporate agendas for capitalist propaganda'.

There are differences in the tone of the two sets of stories. In many ways the stories on the Frack Off homepage are stridently assertive, and some are clearly confrontational, almost apocalyptic, as illustrated, for example, by the statement 'the present system's addiction to massive amounts of energy is driving this headlong rush towards oblivion and unless something is done to stop it we will all be dragged down into hell with it'. Cuadrilla's stories have a more reassuring tone and look to reflect a more consensus-based model of society in which the company is working with, and for, the general economic and social good and its operations are part of its contribution to social and economic development.

More specifically perhaps, the importance of what is 'natural' is interpreted differently. For Frack Off, fracking is part of an 'extreme energy' scenario, and as such might be seen as the antithesis of the natural, as characterised by a stronger emphasis on the development of renewable energy resources. By way of contrast, one of the Cuadrilla stories focuses upon the natural processes responsible for the formation of shale gas over geological time and uses images of upland landscapes in Northern

England to suggest that its operations are in harmony with the natural environment. Another story describes how the company's operations are helping the gas to escape.

The two sets of stories reveal very different positions on the impact of fracking on the local environment and on associated impacts on local communities. For Frack Off, fracking causes a wide range of damaging local environmental impacts and is a problem per se, with no attention given to how such impacts might be mitigated or minimised. This is illustrated, for example, by fears about the contamination of water resources and the release of radioactive waste and toxic and carcinogenic vapours, associated concerns about breathing difficulties for those living close to fracking operations, and reports of neurological and reproductive problems in humans and animals. For Frack Off, the only way forward is to stop fracking and thus to eliminate these impacts.

## 'The two sets of stories reveal very different positions on the impact on the local environment'

In its stories, Cuadrilla acknowledges public concerns about environmental impacts and potential associated health hazards but emphasises how the company is monitoring a range of environmental impacts and the measures that the company is taking to minimise and eliminate these impacts.

While the Frack Off stories are largely presented as printed narrative and the Cuadrilla stories as video clips, there are also differences in the way in which the two sets of stories are told. The Frack Off homepage essentially provides a series of stories told, effectively anonymously, from the organisation's perspective. Many of the stories in Cuadrilla's video gallery are presented by, and feature, a range of company personnel, and in the case of the 'Preston New Road' videos by an experienced and well known former local television political correspondent. In pursuing this approach, Cuadrilla can be seen to be looking to lend authority to their stories.

This is seen in a number of ways – in stories featuring the company's geoscientists, who look to offer scientific authority, and in stories about site operations and local environmental impacts featuring senior operational and technical managers. At the same time the two videos featuring Cuadrilla's Chief Executive Officer clearly seek to endorse the company's commitment to the local community, while using a former television political correspondent can be seen as providing external media endorsement to the company's development activities and future plans.

The stories reviewed here are but a small element in the much wider process of storytelling in the planning process surrounding the proposed development of shale gas by hydraulic fracturing. Nevertheless, the stories featured on the selected Frack Off webpage and in the Cuadrilla video gallery seek to inform and to challenge, and they can be seen to have lively, emotive and potentially powerful human appeal. As such, they can provide valuable insights into the debate about fracking and into how the issues that are likely to inform local authority planning decisions are being contested.

More generally, the stories reviewed here would certainly seem to be consistent with van Hulst's belief<sup>4</sup> that storytelling within planning is used politically to persuade politicians and audiences while simultaneously drawing attention away from alternatives. At the same time, Throgmorton's concerns<sup>9</sup> that powerful actors will look to marginalise competing stories, and thus attempt to persuade planners to adopt plans that appeal to a narrow range of stakeholders, might be seen to resonate here.

● **Peter Jones** and **Daphne Comfort** work in the Business School at the University of Gloucestershire, and **Alex Lee** is the former landlord of the Greyhound pub, in Cheltenham, where he told an awful lot of stories. The views expressed are personal.

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