

The fracking debate in the media: The role of citizen platforms as sources of information

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Abstract: This article focusses on the analysis of the news coverage of fracking in the seven daily national Spanish newspapers in 2012. The results of the analysis of the 246 news items, based on the theory of framing, have demonstrated that the debate in the Spanish press also focusses on the concept of risks versus benefits. The environmental threat stands out as a result of the large number of actors, appearing as sources in the news items that are against the technique of fracking. Regional politicians and anti-fracking platforms lead the public debate, forming a negative opinion of this technique in Spain.

Keywords: fracking, media, framing, sources, platforms citizenz

*Le fracking au cœur du débat dans les médias: le rôle des plateformes
citoyennes comme source d'information*

Résumé : Cet article se focalise sur l'analyse de la couverture médiatique du fracking dans sept journaux nationaux espagnols parus en 2012. Les résultats de l'analyse du contenu des 246 articles d'information, analyse fondée sur le cadre

méthodologique offert par la théorie du « framing », ont montré que, même dans la presse écrite espagnole, le débat s'articule autour du rapport risques / bénéfices. La menace environnementale est mise en évidence à travers un grand nombre d'acteurs qui s'y opposent et qui représentent les sources de ces articles d'information. Les hommes politiques régionaux et les plateformes anti-fracking sont les protagonistes du débat public qui donnent une lecture négative à cette technique en Espagne.

Mots-clés : fracking, médias, framing, sources, plateformes citoyen

Introduction

The increasing demand for energy in the planet has led to new sources of energy being explored. Whether it is an increase in the use of renewable energies or new technologies in order to make the most of natural resources, everything goes in order to obtain such an essential element as energy. Hydraulic Fracturing, or fracking, for obtaining non-conventional gas or oil has become a consolidated technique for exploitation in countries such as the United States.

Fracking consist of pumping non-conventional gas or oil by fracturing the parent rock (slate and shale). In order to extract the fossil fuel embedded in the rock a technique of mixed drilling -vertically and horizontally- is used to, subsequently, inject water, sand and a number of chemical additives at high pressure. This causes the rock to fracture; the gas is released and flows up to the surface along the borehole.

This method has been used in the United States since the 1980s and in the last years its introduction is being debated in Europe. It is a controversial technique. Its proponents consider it to be a new method of obtaining energetic resources; new in the sense that until recently it was economically and technologically unfeasible. Added to this is its potential to generate jobs around these industries, as it has already happened in the United States. Another of the strengths of slate gas is that the emissions to the atmosphere are reduced compared with coal.

However, opponents claim that this technique is detrimental to the environment due to the risk of contaminating ground water, the amount of water its use involves and the increase of micro earthquake activity it may generate. With respect to the reduction of carbon dioxide emissions, according to Greenpeace, some research has shown a 4% increase in methane gas, which cancels that argument.

The mass media comprise the principal arena within which scientific controversies and issues come to the attention of decision makers, interest groups, and the public. The media also powerfully shape how policy issues related to science

and technology controversy are defined, symbolized, and ultimately resolved (Nisbet, 2003). In this article, we present the first study of the media reporting of the use of fracking in Spain, with a particular focus on the sources quoted in the main newspapers and the role of the anti fracking platforms into as a new actor in this controversial issue¹.

The aim of this research is, on the one hand, to determine whether the debate on the use of fracking in Spain is also presented in terms of benefits and risks based on analysis of the position of the sources that appear in the news. On the other hand, there will also be analysis of the presence of anti-fracking platforms as new informative actors. Specifically, this study is guided by the following research questions:

- Is the debate on the use of fracking in the Spanish media based on benefits/risks?
- Who are the sources that are quoted in the news on fracking and what is their position regarding the topic?
- What role the anti fracking platforms play in such coverage?

1. Socio-political background

1.1. Fracking in US, Europe and Spain

Fracking first started to be used on a marginal basis in the United States in the early nineteen nineties when drilling into compact formations of tight gas began. One decade later, its use was expanded to shale gas, which is found in the rock bed where it was formed, by drilling the Barnett geological formation (Texas) in 2003. The success achieved lead to a progressive increase in this type of production that rose from 3% of total production to 40% in 2012.

It is difficult to apply this energy revolution from the United States to the European context. Above all, this is due to one fundamental aspect: the property rights of underground resources. In the United States, the large majority of underground resources are private property.

In January 2014, the European Commission introduced a set of recommendations inviting the Member States to implement hydraulic fracturing, attending to the fact that the oil and gas import bill amounts to 400.000 million euros annually and that the energy demand is expected to grow by a third by 2030. The EC, therefore, has decided to allow each Member state to decide whether or not they want to exploit shale gas and the recommendations are only meant to safeguard the environment and

¹ This study forms part of an investigation titled "Analysis of the news coverage of energy policies in Spain, reception processes and social organisations", part of the R&D programme lead by the Ministry of Economy and Competitiveness (CSO2012-38363).

to address citizen's concerns regarding transparency and information. The refusal to introduce legally binding regulations was criticized by environmental groups.

This recommendation was published after several years of analysis on fracking. In August 2012, the European Commission issued a report where the authors acknowledge the limitations of the risk put in place. The European Countries are divided between those have imposed a moratorium, such as France, Romania, Germany and Bulgaria, and those where exploration of their deposits is already underway, such as the UK, Holland and Poland.

Between late December 2012 and March 2013, the European Commission carried out a public consultation concerning fracking practice in European countries. In total, 22.875 respondents across Europe participated in the public consultation: a 28,9% think that this method should be developed in Europe provided that health and environment are safeguarded; 37,5% oppose the development of this technique. In Spain, nearly 80% of respondents believe that this technique should not be developed while 2% believe it should; the reminding 18% are in favour if proper environment and public health safeguards are implemented (BIO Intelligence Service, 2013, p. 21).

1.2. Anti-fracking community and citizen organization activities

The non-conventional hydrocarbon extraction using fracking has met resistance and opposition in Spain from many groups of citizens in the face of the risks this technique poses to human health and the environment. Over 16 anti-fracking movements have been identified, some of which have been active since June 2011. Demonstrations, documents and reports are just some of the activities carried out by these citizen organizations that have actually been the ones to show the strongest opposition to this practice.

In September 2012, a platform for a new energy model was created (<http://www.nuevomodeloenergetico.org>) of which a number of different groups, trade unions, NGOs and political parties take part, which aims to be a plural space for social articulation of knowledge and creativity oriented towards the contribution to a new energy culture. On the opposite side, in October 2012 Shale Gas España (www.shalegasespana.es) was born. It is an organization that unites a number of companies in the energy sector industry in favor of the exploration and exploitation of shale gas or slate gas and that supports the use of fracking as a safe practice.

These organizations are created specifically as local citizen movements, formed by residents and neighbors of the affected areas, or a collection of affected groups. In some cases, the existing NGOs, particularly ecologists, come together to form part of the platforms, but in general they did not begin the anti-fracking movement in Spain. For example, the Platform Fracking ez Araba is formed by a group of

associations, syndicates, political parties, groups and individuals that have signed the Manifesto against fracking in Álava (Basque Country) and in this case its capacity of influence over the political space is greater.

Carmen González, from the Cantabria Assembly, insists that they are a group of citizens that are only joined by being against fracking in their land. They work in territorial groups and meet in open assemblies every 15 days. They maintain a close relationship with the town halls of the towns affected. In the same way, Castellón highlights that this movement has mobilized all types of groups and people, ecologists and people that have never had any relationship with ecologism. The proximity and involvement is the main integrating element of these citizen movements in Spain. At this time, media and political attention is growing, but we are still not in a place where the main relevant actor is the general public (Gamson, 2004).

There have been a number of community initiatives in this direction, the success of which has been uneven. For instance, on 31st January 2013, Fracking ez Araba brought a popular initiative to the Basque Parliament with the aim of banning both the extraction technique known as fracking and the extraction of non-conventional resources that may exist in the territory of the autonomous community of the Basque Country. The result was that the proposal was not processed and consequently, it will not be debated in the Parliament. However, at the beginning of 2013 some of the companies have already relinquish the processing of their exploration permits of a part of a high-value agricultural area, such as the Ribera del Duero (Burgos) Qualified Designation of Origin. According to the companies currently carrying out explorations, preliminary technical studies do not show an interesting geological potential; according to other sources, because of the citizen pressure.

More than twenty companies interested in this technique have already applied for 122 licenses in Spain, some of which have already been granted, according to Ministry of Industry. The largest numbers of them are in areas of the Basque Country, León, Asturias and Burgos, although there are also some in Huesca, Zaragoza, Lleida o Murcia. However, while the central Government currently supports hydraulic fracturing, there has been great reluctance at regional level, where some local self-governments have already approved legislation to ban this practice in their territory: Cantabria (April 2013) and La Rioja (June 2013), and some autonomous parliaments have urged their governments to prohibit fracking, such as the parliaments of Aragón (November 2012), Galicia (February 2013), Navarre (March 2013) and Andalusia (May 2013).

Nevertheless, a national law would override these regional laws; in fact, in February this year the Constitutional Court has temporarily suspended Cantabria's Anti-fracking Law, after allowing a Central Government appeal on constitutional grounds. In addition, at local level, many municipalities have opposed this practice

and grouped under a resistance initiative of “Fracking Free Municipalities”, which brings together dozens of towns in Araba, Gipuzkoa, Bizkaia, Burgos, Soria o Cantabria. No legislative advances have been made in this regard other than the new Law 21/2013, of 9th of December, of Environmental Assessment, which legally binds hydraulic fracturing projects, or fracking to be subject to Environmental Impact Assessment.

But what is the true potential of this citizen-based effort and what does it respond to? According to authors such as Tom Paine (1987), people have participatory capacities that are waiting to be activated. Citizens will not take the risk or the effort of participation individually but will associate with other individuals and pull together in a common effort. The anti-fracking citizen movement, which generates that which some authors such as Putnam (2003) have called social capital, gives centre stage to social organizations to materialize citizen participation in the public sphere. As Díaz and Bell (2003) have pointed out the relevance of social organizations lies in their capacity to sensitize people to become effective agents of change and a critical force before political power.

Anti-fracking platforms have so far combined a number of formal-direct strategies and actions (institutionalized: introduction of legislative proposals) with informal-indirect ones (those seeking mobilize citizens through demonstrations or documents) that have made it possible to launch a debate in the affected areas.

Vliegthart and Walgrave (Vliegthart & Walgrave, 2012, p. 395) have highlighted how mass media are of “crucial importance” for social movements: “Even more than any other political actor, movements are highly dependent on media coverage to reach their constituency, to turn bystanders into potential participants and to convey their message to the protest target. Rucht (Rucht, 2004) described four media strategies of social movements since the 1960s: abstention (no attempts to get in the media), attack (critique on mass media), adaptation (exploitation of mass media rule), and alternatives (create own movement media).

This paper examines anti-fracking platforms’ strategies in Spain through their presence as source of information in the media.

2. Method. Analysing fracking from framing studies point of view

The studies under the perspective and representation of fracking in the mass media and its impact in public opinion are more scarce and recent. Evensen et al. (Evensen et al., 2013) have conducted an analysis of the reporting of two newspapers of Pennsylvania area. They concluded that the media information is worrying and does not allow for a holistic view of the subject. Batill and Feldpauch-Parker (Batill & Feldpauch-Parker, 2013) argue that the focus of fracking information is largely on the risks posed by fracking rather than in the potential

benefits of this technology to mitigate climate change. In the United Kingdom, Jaspal and Nerlinch (Jaspal & Nerlinch, 2014) have analysed the socio-political debate surrounding fracking in the four main broadsheet newspapers in the UK. The results show how the daily press reflects both sides: fracking is presented in terms of the potential risks that it poses to public health and to the environment. On the other hand, the implementation of fracking holds the advantages of producing profits for the country's economy in addition to creating jobs and providing energy security.

These preliminary studies into how journalists cover the implementation of different types of energy technology highlight that the way in which the media informs the public influences in how these issues are perceived by the general public, stakeholders and decision-makers. Therefore, highlighting the information that points out the risks and the benefits is essential to understanding public perceptions, which can determine the success or failure of the technology being implemented, according with the most prominent approach to framing effects in psychology. Risky choice framing inherently implies the use of 'negative' or 'positive' frames: 'gain' versus 'loss' (Tversky & Kahneman, 1981), 'threat' versus 'opportunity' (Jackson & Dutton, 1988), or 'winning' versus 'losing' (Levin et al., 1986). Valenced frames "are indicative of 'good and bad' and (implicitly) carry positive and/or negative elements" (De Vreese & Boomgaarden, 2003, p. 363). In this study, 'risk' and 'benefit'.

In their analyses of the presence and effect of two specifically valenced frames in news coverage of EU integration ("EU enlargement as an opportunity for Europe" and "EU enlargement as a risk for Europe"), Schuck and De Vreese (Schuck & De Vreese, 2006) highlighted that the valence of media frames only recently received more attention in political communication research but is lacking more systematic approaches. It is necessary to pay more attention to the implicit qualities of media frames because valenced frames provide an evaluative framework for individuals that influence their thoughts (Pan & Kosicki, 1993; de Vreese et al., 2011).

Thus, this investigation analyses the journalistic coverage of the use of fracking from this approach, understanding framing as the proces by which news organizations and journalists feature, emphasize, and/or select certain events, issues, or sources to cover over others (Nisbet, 2008). Framing theory implies that information content not only sets the public agenda, but also implicitly forms a way of thinking about certain issues through news frames. The framing perspective recognizes the ability of a text to define a situation or issue and establish the terms of debate (Tankard, 2001, p. 96).

According with Entman (Entman, 1993, p. 52) to frame is "select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation". He explained that frames in the

news can be examined and identified by the presence or absence of certain keywords, stock phrases or particular sentences, stereotyped images, and sources. Gitlin (Gitlin, 1980) identified some typical framing strategies: the overuse of officials as sources, the trivializing actions of opposition groups, the focus on events instead of larger issues, and an emphasis on one side of the argument.

Nisbet (Nisbet, 2008) highlights the importance of sources in the news agenda, which are defined as the voices, actor or groups featured in news coverages such as government officials, environmentalists, or, for instance, antiwar protestors. Competing actors operate as news sources, supplying strategically packaged news items and story information to journalists.

Thereby, in process of agenda building, sources are very important, because their invocation may serve to attribute a given statement to an apparently reliable or knowledgeable individual or institution. The selection of sources is the most “natural” way that the media constructs frames. The presence of certain sources that defend their positions is essential in controversial matters in general, but with this type of specialist information related to technology, the choice of sources determines how the news will be presented.

A content analysis is used to determine the amount of media attention the issue has gained, to classify and quantify the sources and where they stand in the debate. In order to achieve this, an analysis sheet was created which includes the number, location (title, lead), type, number of times quoted and position of the sources (for and against), what defines the news frames presented in terms of benefit or risk. The journalist states the arguments of the actors involved that are explicitly for or against the use of fracking.

The variable ‘for’ or ‘against’ gathers the position that the sources have expressed. It is not a qualitative reading as the declarations in the text are explicit as to the source’s position. The texts that are categorised within the risk frame are those that only contain opinions against fracking. By contrast, the texts that only contain sources in favour of fracking are placed within the benefit frame. Texts that show both points of view, without showing preference, are considered to be neutral.

The analysis units form the news pieces published in the online editions of national Spanish newspapers: El País, El Mundo, ABC, La Vanguardia, El Periódico, La Razón and Público. The sample has been obtained via the MyNews database, which offers news published in all of the Spanish daily newspapers (both the printed and online versions), something that does not occur in databases such as Lexis Nexis. The year 2012 has been chosen as the key year in which the debate appeared in Spain, after the first anti-fracking platforms appeared, when both for and against positions became active following the first bill against fracking in Cantabria, with the consequent reaction of the businesses involved.

A total of 246 texts focused on fracking were found (media attention). After a review of all articles to make sure they are not opinion articles or duplicated news, a total of 218 were chosen for content analysis.

All of the sources, directly quoted or paraphrased, were coded under general categories such as "Politicians", "NGO ecologist", "Industry", "Scientific/Expert", "Anti-fracking platforms" and "Others". All of the sources that are members of the Spanish government, regional or local governments appear under the category of "Politicians". "Anti-fracking platforms" appear under "Civil society", as they do not form part of an environmental NGO such as Greenpeace, WWF, Ecologists in Action or Friends of the Earth, although they do share some opinions and, on occasion, propose initiatives together.

3. Results and analysis of frames and actors

With regards to the amount of media attention, 246 items have been found, including short news items and opinion articles. At the start of the year, fracking appeared in the media in relation to the prohibition of the technique in Bulgaria, which is presented as the country, after France, with the most legislation in Europe in this field (Público, 22th January 2012). In Spain, social mobilisation movements against fracking began following the announcement of the first extractions in the Basque Country. To the frame study and the sources cited, 218 news items have been analysed. That is to say, 28 have been discarded due to being opinion articles, letters to the director or a philological reflection on fracking vocabulary.

Media attention decreased until after the summer and rose again during the last quarter of the year after a draft bill was passed by the Cantabrian government on the 27th October 2012, prohibiting the hydraulic fracking technique within the autonomous region of Cantabria as a means of exploration and extraction of non-conventional gas. After this date, a reporting period was established so that citizens were able to make their contributions. The definitive text was sent to the regional Parliament in order to be passed as a bill on the 21st December 2012. The bill referred to the social concerns regarding the risks that are posed by this technique and the fact that certain social sectors warn of the damage which may be caused to underground water sources. The law was passed unanimously in April 2013.

The initiative of the regional government turned media attention towards the businesses in the sector. All companies with research permits requested or granted by the central or autonomous government, were complaining that what they defined as a "unique opportunity" was being abolished for the investment and creation of jobs in the area. The Spanish Association of Companies in Investigation, Exploration and Production of Hydrocarbons and Underground Storage (ACIEP), which includes, among others, the businesses affected, assured that the technology

used allowed hydraulic fracking to take place using only techniques and products that "respect the environment and protect underground water". From this point on, the number of reports related to this matter increased significantly (Figure 1).

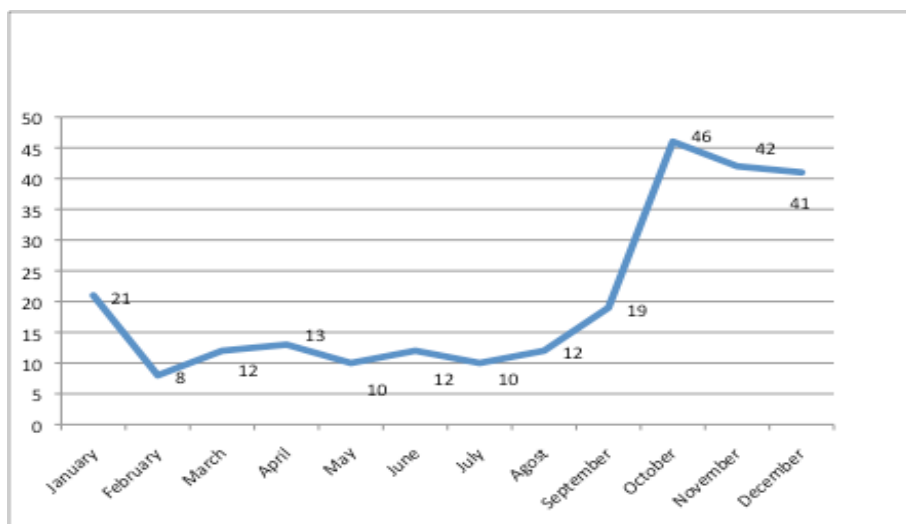


Figure 1. *Media attention Fracking in Spanish press 2012*

3.1. *Risk and Benefit Frames*

The results of the content analysis are very clear; in Spain, the issue of fracking is also presented in terms of the benefits/risks dichotomy, as highlighted by the studies on the social representations of fracking in the United States and the United Kingdom (Groat & Grimshaw, 2012; Batill & Feldpauch-Parker, 2013; Jaspal & Nerlich, 2014), and in general those that focus on the implementation of new energy technologies. With regards to the majority frame broadcast by the Spanish national daily newspapers, the results are also very clear: 77 per cent of the texts highlight the risks associated with fracking.

The risks are linked to the environmental concerns, above all those related to water pollution and the consequent danger posed to health. The benefits are linked to the economic aspects; regional investment, job creation and less dependence on the State for energy supplies.

Of the 218 items analysed, the risk frame prevails in a total of 186, with sources taking an anti-fracking position. In 19 of these items, the benefit frame appears with declarations from sources that are in favour of fracking and in 31 items sources highlighting both perspectives are apparent. As can be observed in Figure 2, this

means that 77 per cent of the news items present an anti-fracking position, whilst only 8 per cent show themselves to be clearly in favour of the technique. Nearly 15 per cent of the texts present a balanced view of the sources without choosing either side. These texts are therefore classed as neutral.

The texts presenting a view against the technique of shale gas extraction are lead by politicians (they appear on 98 occasions), anti-fracking platforms (n = 75), NGO ecologists (16) and experts (7). Under the “others” category, appearing a total of 8 times, are the trade unions, famous people and one private individual.

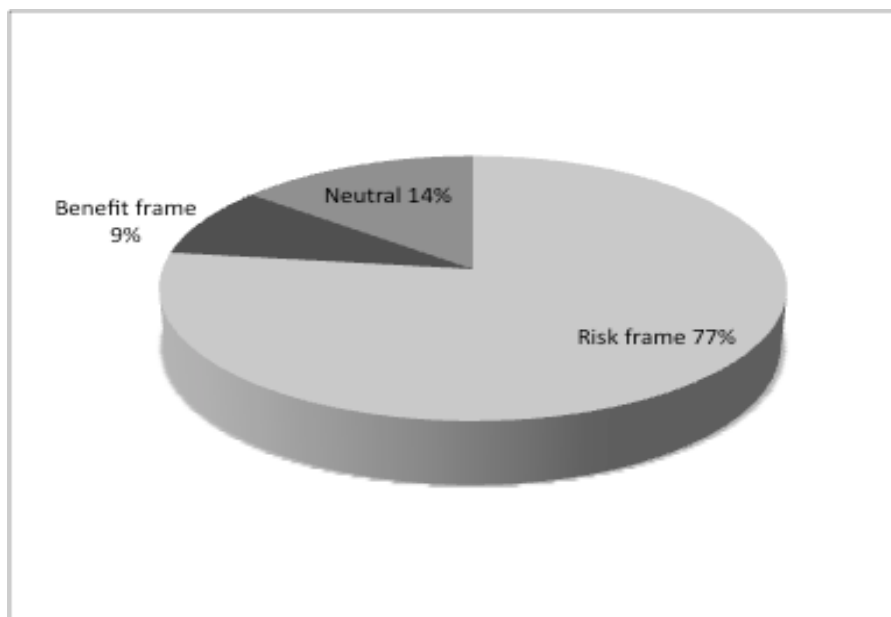


Figure 2. Benefits vs risks frame

With relation to the news items that only present sources in favour of fracking, 3 agents are named: politicians, businesses and experts. Of these, the most common is the politician, appearing on 11 occasions. The businesses that defend the technique appear on 7 occasions and the experts on 3 occasions.

As far as the news items that present both perspectives go, the majority of references are to politicians, on a total of 32 occasions, followed by ecologists (with 23 references), businesses on 17 occasions and experts on 10 occasions. Under the category of “others” there are nine references made to trade unions and one reference made to a lawyer.

3.2. Sources: from Politicians to Experts

Some actors appear to be either one hundred per cent in favour or against fracking. On one side there are the anti-fracking platforms and ecologists; on the other side there are the businesses with an interest in exploiting shale gas. Experts feature in only 6 per cent of the texts and it is the politicians and actors that appear most often; almost half of the 309 sources mentioned are politicians.

The presence of experts is small in comparison with that of politicians and platforms. They only appear on 18 occasions, in favour and against the technique. One example of a piece lead by an expert that stands out is the statements made by Ingraffea, professor of Environmental Engineering at Cornell University (New York), whose research has demonstrated that, although it is correct that carbon dioxide emissions (CO₂) caused by the extraction of non-conventional gas via fracking are considerably less, the level of methane emissions into the atmosphere due to this exploitation is between 40 and 60% higher than the level emitted due to the exploitation of conventional hydrocarbons ("An expert warns that fracking in Spain is unfeasible and ridiculous", *El País*, 21st October 2012). In relation to methane, Steven Hamburg, head scientist of the Environmental Defence Fund (EDF), affirmed that when methane filtration reaches 2 per cent, the natural gas is no longer cleaner than other fuels, such as carbon (ABC, 19th November 2012). The most famous scientist to appear in defence of the use of fracking is James Lovelock, author of *The Gaia Theory*; "Fracking will allow us to save time and we can learn to adapt", maintains Lovelock, who does not hide his growing disdain towards renewable energies and, in particular, wind energy (*El Mundo*, 22th June 2012).

The position of businesses in favour of fracking appears clearly demarcated, for example, after the draft bill against fracking in Cantabria is presented. In this way, the businesses gathered together in the platform Shale Gas Spain have claimed that the ban "would prevent investments valued at more than 100 million euros in only the first stage of exploration". These investments, according to the ACIEP, would lead to the creation of "hundreds" of jobs in the initial stage and "thousands" of jobs in the medium and long term. The ACIEP put to the government that, rather than "closing the door" to fracking, they should develop a list of conditions that would not be prohibited, because to ban this technique would "destroy a unique opportunity for investment and job creation" in the region (ABC, 6th November 2012).

Ultimately, the debate is more focused on the social, environmental and health aspects, rather than on the scientific and technical aspects. Rather than debating the technique, it is the impact on the country that is the main issue discussed. It is interesting to highlight that, together with the government sources, in favour and against, it is the citizen's platforms that feature most often, rather than scientists and experts.

The actors that lead the debate on fracking in the press are, above all, politicians, who appear a total of 141 times. The figure 3 represents 45, 6 per cent of the total number of cited sources (309). In second place, the anti-fracking platforms express their positions in the press on 85 occasions (27,5 per cent of the sources). Ecologists are cited a total of 29 times (9.4 per cent), six more than the businessmen from the energy sector interested in exploitation via the use of the fracking technique (they represent a total of 7.7 per cent of the cited sources). The experts, appearing a total of 20 times, only represent a percentage of 6, 5 per cent.

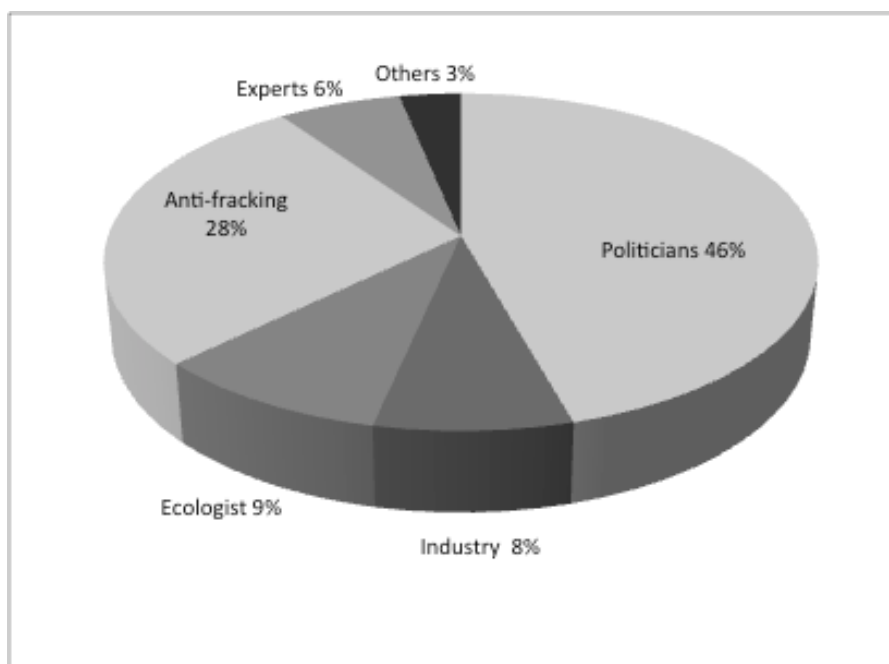


Figure 3. What kind of Sources do journalist use?

Regarding their position, in favour or against, the platforms, ecologists and others (trade unions, famous people, and individuals) appear as being against the technique one hundred per cent of the time. On the opposite side but with the same percentage, one hundred per cent, businesses are in favour of the technique, highlighting the economic benefits that will be gained in the areas where the exploratory drilling has been authorised. Experts and politicians demonstrate both points of view, although with very different proportions. Whilst 75 per cent of the experts that appear argue the benefits of fracking, only 16.8 per cent of the politicians support the technique of hydraulic fracking.

3.3. *The anti-fracking platform*

The anti-fracking groups are the leaders in the media debate in 33 per cent of the items analysed (n= 81). It is very clear that the two platforms that have achieved the greatest media impact are Fracking Ez Araba and the Cantabrian Assembly against Hydraulic Fracking. Both appear as principle anti-fracking sources on 30 and 28 occasions, respectively. On a total of 8 occasions they share the lead with other platforms based in Northern Spain.

The other areas in which anti-fracking collectives have had an impact in the national media are Catalonia and Castellón, although to a lesser extent than those previously mentioned. The anti-fracking platform of Comarques de Castelló is mentioned on 5 occasions and never appears with its full name. In this case, the expression “anti-fracking platform” is used and understood by the context of the information to which it refers. The Catalan group *Aturem el Fracking* appears on 2 occasions. The La Rioja anti-fracking platform also appears on two occasions. In the newspapers analysed, the platforms of Castilla La Mancha, Andalusia and Aragon are not mentioned.

In 20 of the 81 news items, expressions such as group, assembly, citizen associations, collectives, social groups that are critical of the bill, opponents to this technique, ecological organisation or platform, appear next to the “official” name of the platform. On some occasions, the platform is not identified and it is spoken of as a platform to mobilise people against the fracking bill, as opponents to the extraction of gas via the technique known as fracking, as a platform against the system of hydraulic fracking for obtaining gas in the Basque Country, as a citizen’s platform formed in order to prevent these authorisations from being granted, as social and ecological groups that have demonstrated their opposition to the use of hydraulic fracking or as ecological associations and platforms to defend the land.

Anti-fracking platforms have established themselves in the media as sources to be consulted when reporting on the topic and its demands, protests and signature collection become news worthy events. The citizens platforms formed in order to fight against fracking have gained visibility and media attention, appearing in almost one third of the news items based on the topic. Their presence is greater than that of the ecological NGOs. Despite the fact that environmental risks are the most cited, it is the politicians that are the most common sources, which shows that they continue, with regards to this issue, to be the main actors in the news debate, regularly providing information to professional communication departments.

However, in this debate, it must be emphasised that the majority of politicians against fracking stem from the regional community. It is also significant that the social mobilisation of platforms linked to a country have managed to convince wavering politicians to declare themselves against the technique, perhaps due to the

fear of losing votes in their region. In this way, the mobilising role played by anti-fracking platforms in the areas where shale gas sites and exploration permits are granted is fundamental.

These citizen's movements, united by a common interest, have very quickly become the second most important actor in terms of media attention. Not only do the platforms claim to achieve media coverage, but their work within the community, producing leaflets, maintaining and updating websites and holding informative talks on the issue also aim to raise citizens' awareness about what they consider to be a threat.

Conclusions

The emergence of the debate on fracking in the Spanish daily press appears within the context of the economic crisis which is devastating Spain. However, the possible economic benefits that would be generated via the exploitation of non-conventional fuels by fracking, defended by the Ministry of Industry, are not the dominating aspects in the media, which is generally sensitive to government and industry actors. Conversely, the risk frame, that is to say, the threat posed to the environment and, as a consequence, the possible danger to health, takes precedence in the media coverage of fracking, without much difference noted between the seven national newspapers analysed.

The environmental threat stands out due to the large number of actors against fracking that appear as sources in the news items. Of these actors, the appearance of the anti-fracking platforms confirms the participation of the public in the debates surrounding energy. This participation has come about as a result of projects based in the geographic locations that are affected. No platforms working on a national level or that expanded the debate beyond fracking were found. The other significant discovery is how the agents that are linked to the issue are able to determine political action on a local or regional level without breaking the boundaries of energy policies established by the national government.

The results have also revealed minor differences between the journalistic approach to handling the subject in the seven daily newspapers analysed which seems to indicate, at least in terms of the coverage in 2012, that the media have not taken a firm position on the matter. Editorial articles on the use of fracking cannot be found. The risk frame is dominant due to the large number of sources against fracking that take part in the public debate. The position taken by the majority of regional political actors cited coincides with that of the ecological organisations and civil society via anti-fracking platforms formed from the year 2011. Following this first study focussing on the year 2012 and on national daily newspapers, it appears necessary to continue investigating the social representations of fracking that are

still being formed in Spain. Thus, the analysis period will be broadened and the sample will also include the most important regional newspapers.

This study is related to the role of the media in the creation of frames and the dynamics of social movements in general. Specifically, it refers to a transnational issue, the search for energy resources, which at the same time implies a significant impact on small territories. From citizen movements that go all around the world, to local movements, where people meet and establish permanent work to achieve a very specific objective: avoiding the use of fracking in their region. In these movements, it seems that the relationship with the media is not a priority. They have achieved their space as a source in the fracking debate in Spain and do not consider that access to the media is their main task in order to attract attention.

The anti-fracking platforms in Spain are non-institutional actors that are becoming common sources in the media; they have managed to penetrate the productive routines, the media consult them when reporting about the issue of fracking. The movements as citizen actors do not need to hold protests to access to the media, they are no longer covered in the media in a sporadic fashion.

These movements, having achieved their adaptation to the routines of the media, are entering into what Rucht (2004) denominates as alternative strategies. In this way, they consider that their websites and social networks are the best way to communicate with those interested in the subject, to clarify their arguments and to facilitate participation and contact with citizens. It seems that these movements in particular do not work to achieve coverage in the media.

This work profiles the following stage of analysis in the communication strategies of these movements, the relationship with local media and the effects of their work in public opinion. It is therefore necessary to broaden the study on the journalistic coverage of the use of fracking to include countries where its implementation is being debated, both on a legal and social level.

There has not been enough research carried out into the origin of the social representations with regard to these issues, in particular the role of the media and, less still, the sources and actors cited to be against these technologies. The wide investigation into the media representations of climate change shows just how important it is to consider how the media highlight the scientific and environmental concerns. A more in-depth debate is needed, not based on energy security but rather on the need to reduce energy consumption. The big concern seems to be that of fighting to guarantee the increasing demands for energy produced by technology and not that of establishing responsible energy consumption.

References

- Batill, K.M. & Feldpausch-Parker, A. (2013). *Hydrofracking in the news: how does media's coverage of hydraulic fracturing shape public discourse about emerging energy technologies in the U.S. Environmental Communication as a Nexus*. Proceedings of the 12th Biennial Conference on Communication and the Environment, In Press.
- BIO Intelligence Service (2013). *Analysis and presentation of the results of the public consultation. Unconventional fossil fuels (e.g. shale gas) in Europe*. Final report prepared for European Commission DG Environment. Retrieved from: http://ec.europa.eu/environment/integration/energy/pdf/Shale%20gas%20consultation_report.pdf
- Boudet, H. et al (2014). "Fracking" controversy and communication: Using national survey data to understand public perceptions of hydraulic fracturing. *Energy Policy*. 65, 57-67.
- Díaz, J. & Bel, C. (2003). Las ONGs y sus relaciones con la administración. Reflexiones para un debate. *Papeles de Geografía*, 38, 77-102.
- Engelder, T. (2011). Should fracking stop? No, it's too valuable. *Nature*. 477, 271-75.
- Entman, R. M. (1993). Framing: toward clarification of a fractured paradigm. *Journal of Communication*. 43(3), 51-58.
- Evensen, D., Clarke, C., & Stedman, R. (2013). A New York or Pennsylvania state of mind: social representations in newspaper coverage of gas development in the Marcellus Shale. *Journal of Environmental Studies and Sciences*, 1-13.
- Gamson, W.A. (2004). Bystanders, Public Opinion, and the Media. In D.A. Snow, S., A. Soule & H. Kriesi (eds.). *The Blackwell Companion to Social Movements*. (p. 116-151). Malden and Oxford: Blackwell Publishing.
- Gitlin, T. (1980). *The Whole World Is Watching: Mass Media in the Making and Unmaking of the New Left*. Berkeley, CA, Los Angeles, CA & London, U.K.: University of California Press.
- Groat, Charles G. & Grimshaw, Thomas W. (2012) *Fact-Based Regulation for Environmental Protection in Shale Gas Development*. The Energy Institute. The University of Texas at Austin.
- Jackson, S. & Dutton, J. (1988). Discerning threats and opportunities. *Administrative Science Quarterly*, 33, 370-387
- Jaspal, R., & Nerlich, B. (2014). Fracking in the UK press: Threat dynamics in an unfolding debate. *Public Understanding of Science*. 23 (3), 348-363.

- Levin, I., Johnson, R., Deldin, P., Carstens, L., Cressey, L. & Davis, C. (1986). Framing effects in decisions with completely and incompletely described alternatives. *Organizational Behaviour and Human Decision Processes*. 38, 48-64.
- Nisbet, M., Brossard, D., & Kroepsch, A. (2003). Framing Science: The Stem Cell Controversy in an Age of Press/Politics. *Harvard International Journal of Press/Politics*. 8(2), 36-70.
- Nisbet, M. (2008). *Agenda building*. Retrieved from: <http://s3.amazonaws.com/academia.edu.documents/30499490/agenda.pdf>
- Paine, T. (1987). *The rights of man*. Londres: The Thomas Paine Reader.
- Pan, Z. & Kosicki, G. (1993), Framing analysis: An approach to news discourse. *Political Communication*. 10, 55-75
- Putnam, R. (2003). *El declive del capital social*. Barcelona: Galaxia Gutemberg-Círculo de Lectores.
- Rucht, D. (2004). The Quadyuole 'a'. Media stregias of Protest Movements since the 1960s. In van de Donk, Loader, Nixon and Rucht (eds). *Cyberprotest. New Media, Citizens and Social Movements* (p. 123-146). London /New York: Routledge.
- Schuck, A. & De Vreese, C. (2006). Between Risk and Opportunity. News Framing and its Effects on Public Support for EU Enlargement. *European Journal of Communication*, 21(1), p. 5-32.
- Tankard, J. (2001), The empirical approach to the study of media framing. In Reese, Gandy & Grant (Eds.). *Framing public life: Perspectives on media and our understanding of the social world* (p. 95-106). Mahwah, NJ: Lawrence Erlbaum.
- Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*. 211, 453-458.
- de Vreese, C. & Boomgaarden, H. (2003). Valenced news frames and public support for EU: Linking content analysis and experimental data. *Communications*, 28, 361-381.
- de Vreese, C., Boomgaarden, H.G & Semetko, H.A. (2011). (In)direct Framing Effects: The Effects of News Media Framing on Public Support for Turkish Membership in the European Union. *Communication Research*, 38 (2), 179-205.
- Vliegthart, R. & S. Walgrave, S. (2012). The interdependecy of Mass Meida and Social Movements. In *The Sage Handbook of Political Communication*. (p. 387-398). London: SAGE Publications Ltd.