

The future they want – or do not want

Shale gas opponents vs. proponents

between local motives and global scenarios

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Abstract

In recent years, public controversies and social mobilization against hydraulic fracturing and shale gas exploitation have arisen in many countries. This has led to different decisions marked in some cases by a certain degree of reversibility or uncertainty for the coming years. The variety of processes observed, both in North America and in Europe, can hardly be explained by the classic so-called “NIMBY effect”. Dealing with a more complex model of description, this paper will focus on how some stakeholders, opponents, and proponents at different scales of action and decision making – from local settings to the national or international realms – have produced consistent scenarios for the future, bringing together energy and environmental issues, specific economic interests, and general public goods and recruiting other stakeholders in their struggles for or against hydraulic fracturing. Through their participation in public debates and mobilization, many actors have tried to defend, contest, or revise the vision for the future and, more specifically, the future of energy production and use. By giving examples of arguments and counter-arguments of the various actors about the future of shale gas, the paper seeks to clarify the different ways and means by which policy actors and stakeholders attempt to grasp the future.

Largely unknown in the early 2000s, in just a few years, shale gas has become of the major topics of energy and environmental debates in many countries. Since 2008 in the United States, 2010 in Canada, and 2011 in Europe, the number of newspaper articles¹ and reports on unconventional hydrocarbons has grown substantially, revealing multiple positions that are often opposing and contradictory. The exploration and exploitation of gas and oil from shale are now topics that divide and provoke extensive mobilization and have already become a subject of the sociological studies of protest.²

While each country engages in the process of exploration using quite similar fracking techniques born by the same industry, the importance of protest and the government's reaction varies considerably from one country to another. At least until recently, protests in the United States, some Canadian provinces (especially Alberta), Poland, and the Ukraine have remained at a low level or largely localized (Smith and Ferguson 2013; Goussev and al. 2014), while in France and Quebec movements have grown considerably, especially since 2010 and 2011 (Terral 2012; Bherer, Dufour et al. 2013; Fortin and Fournis 2014). In some countries, such as Britain, Germany, there were unique mobilizations of intermediate magnitudes (Bomberg 2013). In the state of New York, the participation of many civic organizations in the debates had a clear influence on the adoption of a provisory moratorium in 2010 and, finally, on the decision to ban hydraulic fracturing in late 2014³. Challenging any explanatory theory of mobilization that does not take into account the importance of the national political sphere (which is reflected in the case of NIMBY), the diverse types of mobilization follow no single contextual variable, such as laws on underground resources, urban density, or the importance of industry in the nation before the shale gas issue arose.

Similarly, government responses have been highly variable and are not directly related to the level of mobilization. In France, the only country that has banned hydraulic fracturing, the law responded to the strong opposition to this practice, while in Quebec, huge mobilizations have not resulted in the same policy reaction. In the State of New York, where the decision to adopt a moratorium was taken in 2010, mobilization was not intense. In Algeria, a country with considerable natural gas reserves but a limited degree of democratic experience, the issue of hydraulic fracturing arose in connection with research conducted by Sonatrach, which created the first signs of an environmental controversy.⁴ But the political color of the government or the strength of environmentalists does not seem to be a determining factor in these cases. In the French case, like the ban of genetically-modified organisms (GMOs) following more than 15 years of conflict, the ban on fracking has survived the change of government in 2012. In the case of Germany, anti-fracking mobilization was historically marked by a strong presence of the Green Party, but has not yet generated a ban on fracking.

The issue of non-conventional oil and gas is particularly rich for re-examining forms of convergence or divergence between mobilization processes and policy change. Rather than getting caught up in

¹ See histogram, part II

² See F. Chateauraynaud F. & Debaz J. with the collaboration of P. Cézanne-Bert (2011), "L'affaire des gaz de schiste. Anatomie d'une mobilisation fulgurante", Socio-informatique et argumentation, 19 December 2011. Available online : <http://socioargu.hypotheses.org/3262>.

³ Governor Cuomo and his Commissioners of Environmental Conservation and Health announced on December 17, 2014, that high volume hydraulic fracturing would not be allowed in New York State. This decision is based on Health Department Report on Fracking in New York State, concluding that the method posed inestimable public-health risks. See "Citing Health Risks, Cuomo Bans Fracking in New York State", New York Times, December, 17, 2014. (footnote added in december 2014)

⁴ « Algérie - Appel pour un moratoire sur l'exploitation des gaz de schistes (opinion) », on the website Maghreb émergent, 26 mai 2014 in <http://maghrebemergent.com>

uncontextualized explanations, such as those suggested by NIMBY theories, or reduce the analysis of actors' games into fixed mappings, we seek to understand the processes as they are occurring in different countries by taking into account not only the actors involved and the national political environment in which they take action, but also how these actors are able to integrate their experience, resources and heterogeneous skills to change the current trajectory, which are reflected in the specific interactions and struggles they spearhead. In other words, while the temporal dynamics in neo-institutional work (Hall 1993; Pierson 2000; Mahoney and Thelen 2009) on public policy and work on mobilization (path dependency) has often been considered as highlighting the growing constraints on the autonomy of actors, we argue that taking into account the pragmatic dimension of experience allows us to grasp the unpredictability and diversity of situations that accumulate over time.

To do this, we will first discuss in Part I how, in the debate on energy transition (Chateauraynaud and Debaz 2013; Chateauraynaud and Lehtonen 2013), resistance to industrial installation projects or the exploitation of resources cannot be reduced to local concerns, since the actors have many cognitive and political means to connect local issues to global ones – especially with the rise of anti-globalization actors and related themes in the late 1990s. The growing interdependence between controversies is reinforced back by the interpretations of actors, which shape their critical repertoires to include varying forms of protest as well as processes of policy change at different scales. In Part II, more details will be provided on the issue of shale gas in France. The amazing trajectory of this case illustrates the interdependence of controversies and the learning curve drawn by the different actors involved in the issue, stakeholders or citizens who participate in the process.

Part I: Interdependence, the Continuous Evolution of Forms of Protest, and Policymaking

Contemporary controversies concerning climate change and other global issues follow trajectories that are often surprising and not unrelated to former controversies which in a sense are “borrowed”. Far from being stress path dependent and influenced by preceding struggles, the new controversies are supported by actors who instead change their behavior based on the experience they gain, tests they have already performed, and developments encountered in the process of confrontation. The role of experience in influencing interactions between mobilization and decision making is particularly visible at three distinct levels.

First, experience is reflected in the process of constructing future scenarios and in choosing local issues through which to engage in global controversy. Debates on forms of energy (i.e., nuclear, hydropower, coal, shale gas, and wind) operate against a background of conflict between representations of economic and geopolitical scenarios. This is particularly true in France, where a national debate on energy transition is underway, and also at a global scale, as the latest IPCC reports on climate change strongly commit governments to move towards a “non-carbon” economy.

In terms of mobilization, the development of future scenarios is mainly based on critiquing the government about what it does and does not do and highlighting respective consequences through the design of a future “apocalypse.” Experience plays a central role in developing these critiques and provides a trajectory through which actors can visualize an unacceptable present and, in response, compel governments to act. Similarly, through the process of policy change, actors develop scenarios of a future transformed through new proposals for public policy (Zittoun 2014). The constructed future scenarios thus simultaneously highlight not only the existence of an alternative future but also

the causal importance of public policy and of policymakers who construct these different scenarios. Thus, the critique of the apocalyptic scenario presented by opponents is used to legitimate their own actions.

Representations first elaborated by opponents on the decision making process and by policymakers on the mobilization process constitute a second type of interaction in which experience is essential. Whether to ban or enact a moratorium, explore, or exploit shale gas, the development of mobilization seems stronger when the actors consider that a decision can be reversing, or at least be submitted to a real inflection.⁵ Conversely, the degree to which mobilization is taken into account and the issue that the mobilization supports first has to do with whether policymakers consider their decision to be irreversible or unable to be changed by mobilization.

Thirdly, and this is of course related to the above, these interactions also reflect the mobilization and decision making experience accumulated by the actors. This relates to the existence and history in each country of how consultation and public participation practices are institutionalized as well as the relationship between mobilization and decision making. Regarding shale gas in Europe, there have been several outbreaks of protest, and in France a particularly rapid and intense mobilization occurred in 2011. Given the stakes, multiple actors invoke the Aarhus Convention, which establishes the right to information and public participation. The Aarhus Convention, and particularly its reference to “public participation” is now a topic of interest in the study of the sociology of mobilization (Article 6: Public participation in decisions on Specific activities). On a global scale, Rio 1992 marked a turning point.⁶ In France, since the Barnier Law (1995), which was preceded by Bouchardeau Act (1983), the issue of public participation is at the heart of the process of regulating not only environmental issues but also health, technology, and energy. Public participation has become imperative and to this the 1998 Convention has contributed immensely.

But this is also the legacy of trajectories created through other processes. Controversies and mobilizations that engage technoscience are not independent of each other and we must highlight the interactions between the different issues. Connections operate on several lines of confluence or convergence: there was first learning effects by continuously feeding repertoires of action and argument; some actors, sometimes described in the literature as “entrepreneurs of causes” are able to bring together worlds or networks previously dissociated; exemplary forms used to manufacture support for new situations; finally, rising in generality or bringing together multiple causes, actors produce new argumentative or interpretative configurations. This kind of argumentative convergence is particularly visible in the trajectory of issues such as climate change or biodiversity, or the more direct political issue of inequality (Rosanvallon 2011; Piketty 2013).

Regularity and singularity of protests and the importance of critique

Unlike NIMBY theories involving the same interest and the same kinds of mobilization, when confronted by a similar problem, such as shale gas, taking into account experience highlights the importance of national configurations and of learning from experiences, which accumulate through the aggregation of critiques developed during different mobilization and decision making processes

⁵ On this crucial point of reversing decisions, as per the cases of France, Quebec, Britain, Poland, Algeria, Germany, and even recently Australia, there are clear differences between nations.

⁶ The right to participation is already present in the UN Declaration of Stockholm (1972) but it is best proclaimed by the 1992 Rio Declaration on Environment and Development through Principle 10. The first sentence of the Rio Declaration states that, “[T]he best way to deal with environmental issues is to ensure the participation of all concerned citizens, at the relevant level.” On the concept of “turning point” and its role for interpreting narratives see Abbott (2001).

(Dear 1992; Rabe 1994). While NIMBY is incapable of explaining mobilization, it is important to point out that NIMBY is used as an argument by actors who seek to react against mobilization (Lolive 1997; Jobert 1998; Trom 1999).

We know that there is a close relationship between the use of the term “NIMBY” and the logic of social acceptability.⁷ However, it is useful to perform a reflexive and critical review of these categories. Social acceptability is based on risk management in the 1970s. Here there is an impressive repertoire of protest figures, distributed in space and time, so that regularities can be clearly seen, as well as singularities. Thus, conflicts around specific places or objects (e.g., antennas, shopping centers, incinerators, ports, dams,⁸ and of course mine sites...) are products of learning from other experiences of conflict and reactions to norms and critics that are embedded within them. Examples of this include the slogan from nuclear power struggles in the 1970s: “Neither here nor elsewhere!” or the statement most recently observed in several controversies “Not X and its world!” – where X can be nuclear, shale gas, nanotechnology, an airport, or a tunnel. In each process, the games of actors vary considerably and cannot be reduced to a simple opposition between project supporters, agents of global capitalism, and citizens' movements, which have a monopoly on “protest action”, highlighting the notion of citizenship at the heart of argument struggles (Clarke et al. 2014). Populations, locally-elected politicians, economic actors, media and media research, governments, and international bodies comprise a complex world, rarely unified around a spokesman or fixed and determined joint visions. And this is even more the case when it comes to the world of NGOs, which consists of all kinds of entities, , which often inherit conflicting political stories that generate many differences that unexpectedly converge. Among the more visible fracking lines, we find the challenging relations between NGOs, which have the capacity to take action from a distance, and the local public, which comes together around its own experiences and usable knowledge (Fischer 2000). In this way, NGOs that arrive to specific sites to connect with victims' associations, both of which are not always in sync, can produce tensions between what the literature has called “militant activists.” Another distinction should be made between NGOs that are highly integrated into the institutional web – as demonstrated in the French case – and those whose mode of existence is essentially based on critical performance (typically France Nature Environment versus Greenpeace or the World Wildlife Federation versus Friends of the Earth). But rather than reducing the games of actors via a logical mapping, it is best to grasp these games in action during the process or in the way in which they anchor in media. We discover here a variety of trajectories, depending on adaptation capacities or difficulties, which explain the unpredictability of mobilization processes and indeed of the closure of controversy or conflict. We may notice here that the law itself is rather a way to revive the critique, especially when actors take advantage of the myriad of available laws and legal procedures (Hermitte 2013).

In this space of variation, which refers to multiple transformations in the relationships between local and global, we can add a clear asymmetry. A descriptive shift was observed long ago between critical actors, neighbors, and victims' associations, on the one hand, and, on the other hand, the grasping of more discrete games conducted in the most confined circles where policymakers and industrial stakeholders interact. This shift often compels social scientists to conform to the suspicion logic

⁷ On Nimby and Banana, see debates around Richard Szanto (Corvinus University of Budapest) focusing on Siting Conflicts in Hongria. See R. Szanto, « Waste Management Facility Siting and Social Conflicts – the Case of Hungary” , 2013, accessible on line, <http://concertation.hypotheses.org/847>

⁸ A highly publicized case of conflict around a dam, involving indigenous people, is Belo Monte in the heart of the Amazon in Brazil.

about agreements for special interests rather than general interest. To avoid confining the description of critical processes in an all too rigid normative corset, we suggest working in the contexts of interaction between stakeholders without prejudging their capacity for action and belief. The scope of their trust or distrust on potential projects or devices that established them as "residents", "users", "indigenous" or "audiences" depends precisely on multiple interferences and chain reactions produced by concrete moments of confrontation. In some situations the refusal to discuss or to negotiate is a feature to take into account. To understand the shift to radical contention generally considered as consultation or public participation failures we suggest notion of "rebellion of milieu" (Chateauraynaud 2013).



Marking the anti-shale gas protest between the town hall and the police station in Villeneuve-de-Berg (Ardèche, France). Photo FC, May 2012

The different regimes of critical work

In a public controversy, the separation between acceptable and unacceptable changes meaning depending on the form and the subject of critics: procedural critique, denunciation of injustice, and radical critique of system. By distinguishing regimes of criticism more precisely, it can be better understand as to why some confrontations create points of irreversibility in the path of a public issue.

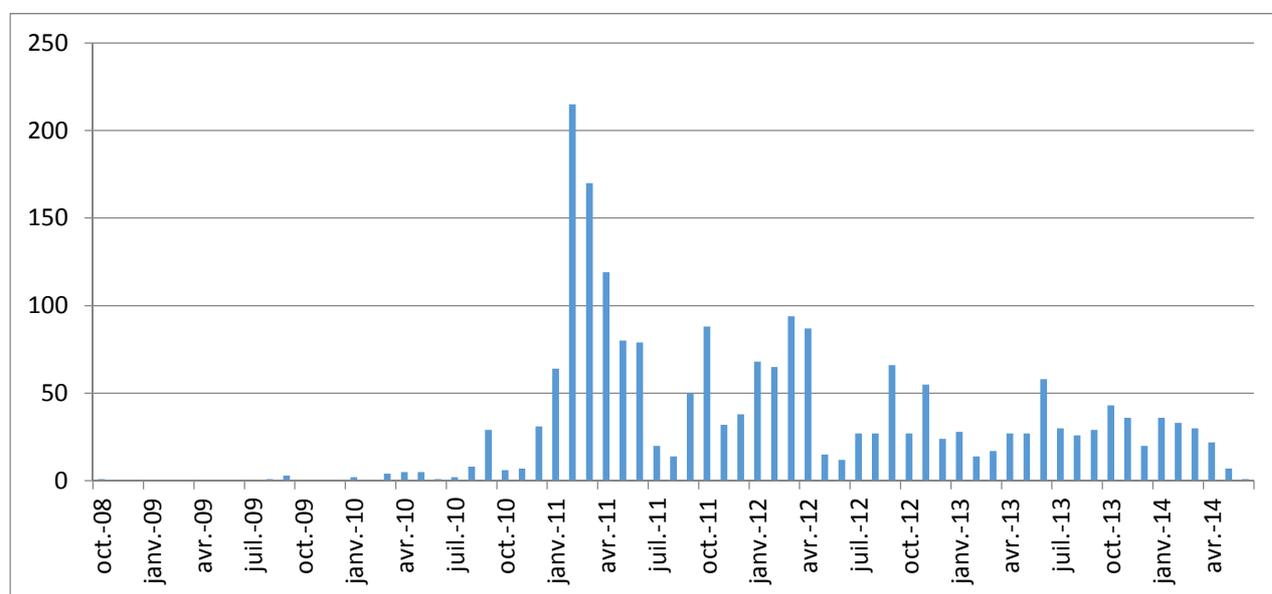
The first regime, the technical or procedural critique, usually aims to challenge the calculations, methods, technical choices, and evaluating expertise designed to assess risks and benefits. This is obviously the way that suits most people who support a project because the initial framing is not fundamentally challenged and because critiques, through deliberation, provide material for a process of co-construction or coproduction (Jasanoff 2006). The expertise and overall decision making

gradually become enriched from questions and critical comments, and if the planned trajectory becomes more nuanced (as in the emblematic case of railway lines or electric lines), the project ends up winning the consent of the greatest number of stakeholders. Or, at least, the promoters manage to silence criticism: critical losses are taken one by one, either by endogenisation (taking into account the technical and procedural aspects) or by shifting (promoters change the settings, for example, by playing with the location, the time frame, or the extension of a project in order to benefit from more favorable environments). It should be noted that even in cases of acceptability based on depletion, which is further grounded in technical and procedural critiques, suspicion of corruption and conflict of interest are not absent. In fact, the agreement may be terminated if the quality of the relationships become distrusting, which is usually the case with the emergence of scandals, which often evolve very quickly into the second critical regime.

The second regime on justice criticism is very disturbing for government – at least in the short term – because actual or potential victims cannot be treated with contempt (Honneth 2000, 2006) without producing an underlying, long process of rebound effects (Angenot 2008) that can enter into a cycle of political violence. The environmental justice movement, born in the United States in continuity with the civil rights movement (Sze 2001), illustrates quite well how the unacceptable can translate to durable injustice. The nature of the justice trial remains the most used means but the repertory of action is sufficiently diversified to allow for the expression of indignation or legitimate anger (Chateauraynaud 2011; Jasper 1998). Means of reparation, taking into account the full range of compensation leading to recognition, play a central role because they are the principles of the closing controversy or the revival of critique. These means of reparation prepare the shift to more a more overtly political regime.

The third regime is the radical critique of the "system". Often supported by minorities, each protest movement can in some contexts come together around the radical questioning of the system, meaning the form of economic domination, development model, technological system, and the imposition of cultural norms, etc. The case of GMOs is here again exemplary – and by some aspects, in the French case at least, shale gas is closer. A radical critique supported by very specific groups, which is constituted around an activity or a way of life (neo-rural promoters of traditional agriculture and radical ecology, for example), manage to unlock procedural or technical critiques or the denunciation of injustice affecting only specific targets. This is done in order to initiate a general mobilization process leading to the withdrawal of a technology and of the economic model that underlies it, creating both a sustainable balance of power and a series of precedents (i.e., actions, decisions, or positions claimed by actors), which are replicated by other actors. What is discussed here is the model of society, the form of development, and the type of political economy, refusing the official space of calculation defining benefits and risks, and underlying the deep dependency caused by a technological choice, thus reproducing here the critique made by Ellul against *The Technological System* (Ellul 2012 [1977]), a huge reference for neoluddism (Jones 2006). The major extension of this alternative claim has long been driven by anti-globalization. Nevertheless, during the Rio +20 Conference, arguments and issues were updated but with a marked loss of political significance.

Part II: The Tortuous Path of Shale Gas in France



This histogram shows the number of key contributions in France (selected by a specific algorithm on the web, media, political sphere, official reports, NGO communications, etc.). All these contributions concern fracking and shale gas in public arenas from October 2008 to April 2014 (time-line by month). Obviously, the temporal dimension of corpora is a strategic variable for analyzing controversies and mobilizations over time. On the text database analytic method used here, called socio-informatics (see Chateauraynaud, 2009, 2010)

Phase 1. Between lack of consultation, bureaucratic routine, and blindness of actors: the authorization of the first fracking license – a self-timer issue?

To understand the emergence of the mobilization process, it is essential to consider not only the time "trigger" but also the context in which it takes place. One of the particularities of mobilizations in France against shale gas is the time lag between the initial event, the granting of three fracking licenses on March 1, 2010, to which there was no reaction, and the emergence of mobilization against these licenses in December 2010 without any other special event occurring before this date. In other words, far from the idea that it is enough for the actors to have an interest like "in my backyard" to mobilize, the context in which the indifference to the granting of the licenses occurred is an indicator of the importance of attention (or the lack thereof) to the event. This allows for the understanding of the "blindness" to certain critical events and reinforces opportunities to observe mechanisms of "awakening."

It is important to first examine the issue of the actors' blindness, or lack of awareness, in the period when these initial fracking licenses were granted. When the process is studied, it appears that the

granting of the licenses was publically documented, which is evidenced by news articles⁹ that chronicle the granting of three licenses. On the contrary, these articles reveal the willingness of industry stakeholders to make their new project known. This also has to be considered in light of the fact that newspapers receive thousands of press releases, of which only certain ones are published. Moreover, far from quick, the process to obtain licenses to begin fracking activities is long – around 2 years, and there were official announcements in the Official Journal (OJ) and the OJ of the European Union at the time when each application for a license was submitted. But the issue that many stakeholders were completely unaware of the granting of the licenses, including ministers, administrations, political actors, and journalists, as well as NGOs and environmentalists parties. It seems as though they saw nothing.

Three assumptions allow us to understand the actors' unawareness and highlight the steps of the process the shale gas case. The first is based on how the division of labor in bureaucratic systems promotes administrative invisibility of an issue. Obtaining permission for shale gas exploration and exploitation do not require special procedures in France; rather, it is the same routine process used for securing mining permits. More specifically, the procedure for obtaining an exploration permit is a fixed, routine administrative procedure structured by laws, decrees, and circulars. It is divided into several stages, with each stage forming a piece of a puzzle with its own rules, actors, and procedures. The first step is to obtain an exclusive exploration license. This step takes about two years and requires the alternating intervention of DREAL (Regional State Department of Environment, Planning and Housing), the Prefect, the Exploration and Production of Hydrocarbons Office (which is part of Energy and Climate Department), and of the Committee of Industry, Economy and Technology. It is distinct from a second step in which requests are made to begin exploration work and these are managed by regional DREAL offices and the local Prefect with assistance from the Directorate of Risk Prevention's Office of Soil and Subsoil, which is part of the Ministry of Environment and Sustainable Development. This first sequence, comprised of two separate steps, is distinct from the process of obtaining an exploitation license, which is managed by the Exploration and Production of Hydrocarbons Office and is governed under raw materials and mining law with the Directorate of Water Concessions and Biodiversity.

In other words, the administrative mechanism for obtaining licenses and permits to begin exploration work involves three offices belonging to three different government ministries as well as the regional government at the local level. Thus, the authorization request is divided, fragmented, and partly invisible. For example, the technical description to explore that lies at the heart of the controversy is not addressed in the first step of the procedure, but only in the second. The three exploration licenses that were granted on March 1, 2010, did not include the "fracking" component as that was to be included in the work request in the second step of the procedure, which never happened. This does not mean that policymakers were unaware that permits for the exploration of shale gas require fracturing rock but they did not feel "responsible" for this nor could legitimately intervene in this field of risk prevention that was outside their domain.

The second assumption is that of definitional blindness in the administrative procedure, which includes the description of the problem and the definition of concepts that structure the debate. As

⁹ « Total décroche un permis d'exploration de gaz dans la Région de Montélimar » (AFP, 31/03/2010) ; « Total sonde à nouveau l'hexagone » (La tribune, 29/03/2010) ; « Révolution énergétique en vue grâce au gaz naturel » (La tribune, 29/03/2010) ; « Un pétrolier texan va explorer la roche nantaise » (Le Midi libre, 23/04/2010) ; « Dallas au Larzac » (29/04/2010) ; « GDF-Suez va obtenir feu vert pour Gaz Schisteux en France » (DJ Bourse, 22/04/2010)

is often the case, most literature about this subject begins by explaining that shale is not shale¹⁰ and that the gas called "unconventional" gas is identical to "conventional," and so the words that structure the debate are unclear. We find such confusing terminology in reports and parliamentary debates,¹¹ with several members regretting that the terminology used to outline the legality of certain practices was not clearer.¹² Gonnet and Martin's parliamentary report even stated dissatisfaction with the inability of experts to define the category of "unconventional oil" because "nothing seems to bring together the different exposure categories."¹³

The lack of consistent definitions is indicative of the plurality of interpretations with which actors grasp their objectives, and understand them in the context of other situations in which exploration and exploitation either change or remain status quo. Some actors indeed do not hesitate to justify how "normally" these three licenses were treated in the administrative process by emphasizing their lack of novelty. Since the 1990s, many licenses for the exploration and exploitation of coal gas, which is part of "unconventional" gas, were issued. It must be said that the extraction of coal gas does not rely on the so-called "fracking" technique that is at the center of controversy. But while the fracking technique was not used in this case, it has been used for many years by oil companies as part of both gas extraction and more especially the extraction of "conventional" oil, which is made available when a well is dry and hydrocarbons are trapped in the rocks. Moreover, a first exploration license was granted to Conoco in 2006 for "tight gas," which is considered "unconventional." Then in 2007, the Vermilion Company obtained a license to explore "conventional" gas. This shift evidences the easy bridge from "unconventional" to "conventional," further attesting to the lack of clear definitions.

For actors who have had to deal with the case of shale gas exploration licenses, the case in question is therefore not really "new" or a "problem." Neither extraction nor the "unconventional" nature having been previous "problems." Rather the conflict lies in the combining of the two that allow for shale gas to be treated within pre-existing legal channels as a "normal" issue. This does not mean that the exploration of shale gas is not a novelty for the actors but its administrative definition does not require specific treatment. What is even harder to understand is that nobody anticipated protest over the issue in France despite the first overseas signals, especially in Quebec.

This issue of "normalizing" the treatment of shale gas intersects with the third hypothesis, which concerns invisibility caused by major energy stakeholders in France not seeing the bigger picture as they are not interested in the nation's mining industry. Mining policies are quite old in France and are managed by engineers of the "Corps des Mines," which is a group of high civil servants who, on account of their training and accessibility, have jobs in the high civil service in the Ministry of Industry, the Department of Energy, and – thanks to the well-known "revolving door" – leadership positions in major industrial groups. It is impossible to understand the importance of nuclear policy in France, for example, without examining the "Corps des Mines" engineers. However, while the Corps des Mines engineers are selected among the best students of their generation, it is clear they have largely deserted the field of mining.

Faced with this feature of the French system, it is therefore not really surprising to see that the main actors involved in shale gas are essentially trained geologists that do not belong to a "grand corps."

¹⁰ See for example « Shale ou Schiste ? Le débat linguistique » in N. Mousseau, *La révolution des gaz de schiste*, ed. Multimonde, 2010, p. 3 ; or the chapter « Des mots et des choses » dans Fellous J.-L., Gauthier C., *Le gaz de schiste, nouvel Eldorado ou Impasse*, ed. Odile Jacob, 2013, p. 24-26

¹¹ « Dans l'expression « gaz de schiste », le terme « schiste » est donc par définition un terme qu'il est souvent conseillé d'éviter » (p. 15), information parliamentary report Gonnot/Martin, 8 juin 2011

¹² Cf. See for example the speech of Yves Cochet during the parliamentary debates

¹³ Parliamentary Information report Gonnot/Martin., op. cit., p. 19

This is the case of those in charge of routine registration management within the Hydrocarbons Operations Office, and it is also the case of individuals working in the Office of Soil and Sub-Soil, the director of which does not belong to the Corps des Mines. Within the Corps des Mines, the only real specialists who could address the issue of shale gas are far into their careers and near retirement. For young mining engineers, the mining sector is a relic of the past and reminiscent of quarries. Between 1990 and 2010, the staff of the Office of Exploration and Production of Hydrocarbons also greatly diminished in size following a decrease in the number of licenses solicited by mining companies. The lack of interest is also reflected in the shale gas industry. The first companies to take an interest in shale gas were groups of modest size, such as Seven Petroleum, which abandoned their plans, and Schuepbach, a Texas group led by a Swiss geologist and twenty staff members. Total, which does not have a significant team in France that works on this kind of subject, asked for license on the last day of the 90-day competition period for a specific license solicited by Schuepbach. As will be noted by Arnaud Gosse in his report on the reform of the mining code, there is no longer a single firm lawyer who handles the mining law, an area which has been almost deserted by the lawyers.¹⁴ What is true in the bureaucratic system and in large enterprises is also reflected in the NGO sector. None of the major NGOs in France did not have qualified staff to address to these questions until the end of 2010. The film *Gasland* and protests in Quebec and in the state of New York were relatively unknown to people in France, or only known of by a few, to the extent that there was no real media coverage.

Phase 2. The start of mobilization: Beyond-NIMBY and altermondialism

Although there are several articles that discuss the issuing of the three licenses in March of 2010, one of which was titled "Dallas Larzac" to evoke the resilience of a population of a region marked by spectacular demonstrations in the 1970s and the late 1990s,¹⁵ there was not the slightest trace of mobilization before December 2010. While this belated awakening mentioned in the previous paragraph reveals the absence of organized networks and structured around these issues, the rapid degree of protest mobilization has surprised most observers (Chateauraynaud et al. 2011). In two months, the mobilization dramatically unfolded through various kinds of actions, such as public meetings attended by more than 500 people in villages that hardly count this number of inhabitants, events, protests (e.g., one in Ardèche where there were some 10,000 people), bylaws, petitions, letters to ministers, etc.

To understand this, the conditions that led to the start of processes that further led to the expansion of the mobilization must be considered. While, as suggested by NIMBY theory, the local is a central element for understanding the initial process of gaining the attention and interest of local individuals, we cannot understand the conditions under which mobilization emerges and, more importantly, expands without taking into account the profile of activists who are mobilized and have some experience in mobilizing. Such a study highlights the importance of learning and interaction between different controversies in terms of argumentation and repertoires of action, and the ability of actors to build a set of critiques that fit a local problem into a broader issue.

¹⁴ Arnaud Gossement, *Droit minier et droit de l'environnement. Eléments de réflexion pour une réforme relative à l'évaluation environnementale, à l'information et à la participation du public*, 12 octobre 2011.

¹⁵ « A Texas oil obtained from the State a three-year license to look for shale gas in the Larzac. Drilling with hydraulic fracking in the country concerned Roquefort and anti-McDonalds. Especially since the Larzac anti-globalization rallies symbol, asked its classification by UNESCO. » (« D9allas au Larzac », Le Point, 29/04/2010)

Although the birth of the movement is seemingly anecdotal, its description reinforces the hypothesis of the blindness of actors and the necessary work being done by some of them to attract attention. It also confirms the importance of not only the local territory as the scope of interested individuals but also the production of a global discourse that consolidates scenarios and visions of the future as a means of bringing local movements together and recruiting the support of actors who are outside these territories, and/or are committed to other causes.

But it is important to first back up a bit to consider the importance of the local as a perimeter of interest. One of the major mistakes of NIMBY theory is that it has undoubtedly confused interests with being interested. If the local helps attract the attention of actors, as the presence of gas-interested industry, this does not imply that all potential interested actors will mobilize, or that if they do, it is on behalf of "local interest." In the case of fracking, many individuals who live in areas where there is interest in extracting shale gas often become activists. For example, Josh Fox, the director of the documentary *Gasland* that focuses on the subject of shale gas, explained in the film that his home in Pennsylvania is in area with shale gas and one day he received a letter from a gas company offering to lease his land. In the case of France, the five main organizers of the first public meeting held on December 20, 2010, in Saint-Jean Bruel – which essentially represented the birth of the mobilization – all lived in the region of Nant and they were also all activists engaged in environmental issues. This was also the case for Fabrice Nicolino, a freelance journalist who discovered almost by chance that fracking was allowed near his home and began to investigate the matter; José Bové, a Green MEP whose house is located within the permit area in Nant; Marine Jobert, who published the first major book on the subject¹⁶ and has a house in the Aveyron region; Patrick Herman, a freelance journalist; and Jean-Marie Juanaberria, a peasant. All of these individuals live in the same region of Nant and are also involved in many environmentalist, farmer, and anti-globalization fights.

If local is clearly the perimeter that attracts the attention of activists, their joining the movement is based primarily on an argument that links exploration, a very localized problem, to issues occurring at a much broader level – from the risks of groundwater pollution to the entire regional water basin to the landscape danger on Larzac, which is currently in a UNESCO classification process, or the lack of participation in and transparency of the law, which must be changed to take into account global climate change. Through working on this topic, small groups of actors, such as the organizers of the first public meeting, engaged the fight and became able to mobilize. Examining their motivations and the words that were exchanged during the first public meeting assists in clearly conceptualizing the base of their common statement.

Indeed, at this first meeting, actors¹⁷ were working to build a common global critical discourse making exploration unacceptable not only in the name of local interest, but also on behalf of increasingly large and important causes. Thus, the actors engaged in a process of interpreting the shale gas issue. This process was significant because these actors took a relatively unknown subject and began to give it meaning.

The purpose of this discursive work was to indeed establish a set of normative and causal links and produce a taxonomic work that helps transform a local and singular event into a general and global problem. By positioning local exploration from the onset in a global "context" of the development of

¹⁶ M. Jobert, F. ? Veillerette, *Gaz de schiste, de la catastrophe écologique au mirage énergétique*, Les liens qui libèrent, 2011

¹⁷ <http://gazdeschiste.valleraugue-aigoual.over-blog.fr/article-premiere-reunion-publique-a-saint-jean-du-bruel-68609538.html>

shale gas and by linking the three licenses "in the same sense," the actors who present "the problem" contribute extracting it from the local and shifting it to a broader scale. This occurs not only in terms of the dimension of spatial scale but also in time. By indicating the existence of a gear,¹⁸ the opponents pull together elements of the past and present, as well as future projections.

During this first task of expanding the subject from its geographical location and its short duration, critiques are made that transform the exploration and exploitation of shale gas into a problem. This critique is constructed by the actors who refer to events that occurred overseas and become understandable and usable. In this way, several types of critiques can be identified that are used to frame the exploration process as unacceptable. Such critiques are found in the first public meeting, the scope of which grew through the various ensuing debates. They include the following:

1. The first critique is found in environmental controversies. It is produced by establishing a causal link between exploration and environmental degradation. To create this link, actors reveal the existence of some phenomena generated by exploration, like the use of chemical cocktails, the pollution of groundwater and soil, air pollution, the diversion of water resources, the production contaminated wastewaters that travel back to the surface, and seismic risk.
2. The second critique is more technical and focused on hydraulic fracking to show its specific risk, its reliability, its lack of complete control, its risks of leakage, and its patents held largely by American companies, etc.
3. The third critique is more procedural than technical. It concerns more about the lack of transparency and public debate used during the process of issuing the three exploration licenses and it moves the attention of the actor to the problem of mining code law, a problem which has not been addressed by new environmental standards.
4. The fourth critique was already reflected in court case and introduced a landscape dimension. It refers to the destruction of the landscape generated by the many truck trips as well as the number of wells required for profitable operation ("a shale gas well every 200 meters").
5. The fifth critique redoubles the sense of injustice by potential victims who may undergo a health risk, helping to link the exploration/exploitation with putting both the health of individuals and the environment at risk. The report cites diseases related to the water quality of the water table, which provides individuals with drinking water, and this critique also cites many people suffering from respiratory disorders.
6. The sixth critique offers a reading of key reasons on why actors act, disqualifying both the actors and their practices. The presence of American industry and the highlighting of a purely financial interest, which justifies the behavior of industry, contributes to legitimate suspicion and the rejection of the fracking industry and the objection to fracking, which makes it compatible with a critical questioning of the broader system and predation vis-à-vis nature.
7. The final critique, which serves to complete the "naming and blaming" process, broadly focuses on global warming and the impact that this new practice generates directly in terms of CO₂ and its contribution to climate change as well as maintaining a system based on the exploitation of fossil resources.

These different kinds of critiques converge to transform the phenomenon under exploration and serve to draw a picture of an unacceptable future and build an impetus for the government to act

ther licenses are coming" or "you should know that these license are renewable twice"

immediately and take measures to construct a different future without such threats. With the exception of critics who openly question the capitalist system and reference a radical regime that offers little space for negotiation (except perhaps on the redeployment of renewable energy), most critics point out the rather technical and procedural challenge created by fracking, which leaves room for discussion and negotiation.

The call from Pascal Terrasse, deputy and President of the General Council of Ardèche, to the Minister of the Environment illustrates this process of aggregating the different critiques, with his intention being to join different threads of protest and to become a "spokesman of a deep societal movement that is concerned about its future." The deputy's question skillfully combines several critiques, speaking of "great concern in terms of ecology and public health," the unknown consequences "on the environment, water resources, health of the population, on the local economy? "; "criticizes the lack of consultation, "and finally pointing to U.S. multinationals who have only 'financial motivations' before discussing the question of the precautionary principle."¹⁹

The scope of the critiques described above is much broader than solely NIMBY recruitment opportunities. We can observe, for example, how a procedural critique is an important key driver for the recruitment of local elected officials, as evidenced by the numerous arguments used to justify a moratorium. It must be said that throughout the month of January 2011, one mayor after another as well as the President of the Rhône-Alpes Region and the presidents of the General Councils of both the right and left engaged in mobilization. Thus, the composition of the movement was far from anti-globalization activists alone. With critical environmental, landscape, and health issues included in the critiques, actors promoted the recruitment of additional, multiple actors. Many joined the movement following José Bové and others in their struggle. During the months of January and February 2011, there was a proliferation of public meetings involving an unusual number of people (700 people in Saint Sernin January 26, 2011; 650 people in Montelimar on January 27, 2011; 500 people in Le Vans February 4, 2011; and 800 people in Ruoms on February 8, 2011; etc.). Furthermore, all the actors who were involved in the UNESCO process to declare Larzac a historical heritage site also joined the anti-fracking movement.

Phase 3. The impossible compromise for the unexpected decision to ban

While the movement grew considerably throughout the months of January and February of 2011, the government reacted in different and sometimes contradictory ways before announcing the passage of a law prohibiting exploration and hydraulic fracking at the beginning of April. Far from being linear and coherent, the government's announcements were often linked and sometimes depicted messy, successive attempts to extinguish a fire being spread. Beginning with the idea supported by the Quebec case where mobilizations were equivalent to other movements of magnitude in France but did not lead to the decision to prohibit fracking, the existence of social movements is not enough by itself to influence the position of a government. Thus, one must wonder about the reasons that led to the process that resulted in the banning of exploration and hydraulic fracking. Three reasons are suggested as accounting for this outcome in France.

The first reason is related to the electoral context in which the controversy over shale gas took place and disrupted the way actors understood the subject. Between January and March 2011, many if not most people in France were concerned by cantonal elections. Many local politicians were campaigning to win or preserve their elected positions, and sometimes to the General Council. In this

¹⁹ Report on the debates in parliament, 27/01/2011

election period, candidates articulated their position of advantage and the importance of legitimation and differentiation was more pronounced (Edelman 1989, Zittoun 2009). In the relevant departments, rejecting shale gas exploration was a basis for gaining legitimacy and adopted by most candidates, and this seems to point to the illegitimacy of taking the opposite position. The number of elected positions won on the part of opponents to shale gas was considerable, thereby increasing media coverage of the issue. Moreover, while ministers and their staffs were campaigning, local government officials became spokesmen for their respective territories. The multiplier effect of the campaign thus acted as a catalyst for the cause.

To this mobilization of local government officials and mayors, another factor can be added and that is the results of the elections, which were not favorable to the government and had the potential to impact the parliamentary elections in September of 2011 in such a way as to move power from the right to the left. The result of the mobilization of mayors and the shifting of power via the elections contributed on the one hand to pushing Jean-Marc Ayrault, president of the Socialist Party in the National Assembly, to propose a bill to ban the exploration and exploitation of gas shale on March 30, 2011, and Christian Jacob, president of the right-wing party, to do the same the next day in a competitive game designed to not leave the left with the upper hand. These actions prompted François Fillon to trigger the emergency procedure for the law to be passed without delay on April 8, 2011.

Beyond the cantonal elections, the period was also marked by the first preparations for the presidential election of 2012. Environmentalists were in the process of the primary elections to choose their presidential candidate. Shale gas was timely for the candidate, Eva Joly, who activists criticized for not taking a stronger environmental position. In January, followed by press and media, she traveled through Larzac and spoke forcefully on the topic of shale gas. Similarly, it seems that the argument that there is no question about it disrupt by many local events, the proper conduct of the campaign of Nicolas Sarkozy has also helped accelerate the decision.

While the electoral context is essential, it is not sufficient in itself to explain the decision of the government. First, France holds elections almost every year, and it is rather easy to find examples that illustrate that the existence of opposition and protest does not lead to reversing one's position nor does it become the lever for a government to assert its will to reform the "conservatism" of the nation. Two other reasons complement this first political interpretation.

One sees in fact a second reason for the failure of policy strategies to respond to the movement, failure which was revealed by taking successive positions that weakened and changed the position of government ministers on the subject. When the first public protest against shale gas was organized, it seems that the Minister of the Environment, her advisors, and senior administration officials were unfamiliar with the issue. Many of these actors began to learn about the subject over the Christmas holidays when the media began to echo the first statements made by José Bové after the first public meeting on December 20, 2011. In January, alerted by the statements made by José Bové, the office of risk prevention convened a committee of several experts on the subject of shale gas. However, the discourse of the movement against shale gas had already rendered itself dominant over the government, which has said very little on the topic.

The first intervention of the Minister of the Environment in response to the issues raised by the anti-fracking movement revealed the difficulty of structuring a speech and presenting unproven arguments. Illustrated here was how the government's arguments revealed the weak government reaction. This first intervention took place on January 26, 2011, before the National Assembly. In response to a question posed by Pascal Terrasse, as mentioned above, the Minister of the

Environment did not try to deny the existence of the problem, but rather she tried to distinguish it from what was happening in France. In other words, she agreed with opponents on the existence of the problem, which had the effect of legitimizing protests. However, she cited the cause of the problem as not the fracking in general but the specific practice of fracking in the United States. In addition, she made a distinction between the activities of "exploitation" and "exploration."²⁰ Here she began to build an argumentative strategy that allowed her to distinguish French exploration from the American practices in order to illustrate that the French situation was unique. Therefore, the critiques of fracking were considered nothing more than unjustified "concerns." The Minister concluded her argument by brandishing a legal infeasibility argument, noting that the mining code does not suspend the license.

This first line of defense to argue for the preservation of the three licenses facing criticism did not withstand more than two days of speeches from opponents. This was particularly the case for José Bové, who undermined the distinction between French and American cases by highlighting an error on the part of the Minister of the Environment, as only U.S. companies have patents for the practice of fracking and that U.S. companies were those who were coming to explore for shale gas in French territory. Bové also challenged the legal argument against the moratorium, which he considered as not being legally supported.²¹ The arguments made by Bové were effective enough for them to be accepted by the media and by many stakeholders who worked with the Minister of the Environment.

As Mead (2006) suggests, these debates often resemble boxing where each opponent adjusts his/her shots depending on their opponent and how their opponent strikes (Durnova and Zittoun, 2013). On February, 1, 2011, the Minister of the Environment therefore took a new position on the issue by announcing the temporary suspension of exploration permits and the establishment of a fact-finding mission to "clarify the issues." The strategy changed because there was no way to defend the issued licenses. Instead, the new strategy was to suspend the licenses and, in a sense, procrastinate to save time, reconstruct a new strategy, and provide "evidence." This is certainly the way the Minister of the Environment laid out the provisional suspension of the licenses to industry at a meeting on February 9, 2011, to get their consent to halt the process.²² The strategy was confirmed by the Prime Minister on March 11, 2011, which ensured the existence of a moratorium until the submission of the report.

However, while a progress report was to be submitted by the committee on April 21st to the Prime Minister, it announced on April 8th that it was willing to establish an emergency procedure to pass a law banning exploration and exploitation. This new change in strategy that left the writers of the report in disarray once again shows the guesswork and successive changes of position on this issue. It must be said that the argument for the production of "neutral" and illuminating knowledge was not

²⁰ "Dangerous techniques for the environment and destructive are used [in the U.S.]. It is not about to engage France in this way. (...) Is it possible to exploit shale gas otherwise, not to increase gas consumption but, for example, to substitute imports? This is the purpose of these explorations. Again, it must be precise: an exploration license is not a license to operate."

²¹ "It is surprising to hear the minister say that France will not do it, we will not use dirty techniques, it is wishful thinking as patents and technology are American," says the old peasant leader. (...) "Besides," he added, the French groups are backed by Americans on French exploration permit" to Nant (Aveyron), Montelimar (Drôme) and Villeneuve-de-Berg (Ardèche). (...) It would be the only area where the law cannot undo what he did» AFP, 27/01/10

²² "We was clearly told that we would not accept an exploration or exploitation as in US. We are told," the Minister of the Environment told AFP after meeting with representatives of Total and Schuepbach (gas) and Toreador associated with Hess and Vermillion (oil). "The ball is in your court. You say you can do otherwise (...) Show us." a-t-elle ajouté

resistant to argumentative attacks by opponents, who drew on their experience by pointing to over involvement of the Corps des Mines in the drafting the report.

Regarding the third reason for the banning of hydraulic fracking, this reason is grounded in the imbalance of coalitions between opponents and defenders, which privileged the definitions and framing of the issues by the opponents to fracking and viewed shale gas as a problem and not a solution. During the period from January to March, opponents continued to recruit into their ranks, while defenders seemed to count their supporters using the fingers of one hand. We are witnessing a side effect not only to establishing many "collective" working and organized networks but also the proliferation of local elected officials who supported the protest. It was thus not only the several presidents of the regional council of councilors and mayors who enlarged the ranks of the first public supporters of the movement, but the movement continued to enlarge with the establishment of a parliamentary commission of inquiry and another on shale gas oversight and precaution, which brought together over one hundred Members of Parliament requesting an extension of the moratorium.

Faced with this rising mobilization, the very few voices that defended shale gas is striking. Total management and the CEO himself spoke out in February to say that, "There is no issue. Today, we do not know if there is shale gas in France," and further stated that "the possibilities are not so important that there is something."²³ Similarly, the director of GDF on the subject did not comment and quickly distanced himself from the issue. The Minister of Industry was one of the only ones who intervened to declare on February 16th that "France is not closed to shale gas."²⁴ Politically, this Minister is from the left and has a low position in the government compared to the more powerful position of the Ministry of the Environment or of the right-wing leader in parliament, Christian Jacob.

Within the administration, there were very few voices in defense of this potential energy source. As noted above, the high administration was not invested in the shale gas alternative and this was a cause for concern for many actors, which further disturbed other energy policy priorities including nuclear power. This means that the only actors who, at this stage, were crucial for the defense of gas shale were actors who occupied lower positions – independent drillers, geologists, and energy companies. Beginning in March, a struggle to persuade ensued between the proponents of the ban, of which the spokesperson was the Minister of the Environment, and the proponents of shale gas, represented by the Minister of Industry. This opposition is fairly predictable between the two departments and it is already the case on other issues. Both tried to persuade the Prime Minister, but the first one was obviously successful, being able to rely on a broad national consensus.

According to the press at this time, different news articles favored shale gas in December and January and afterwards became increasingly rare. Recognition by the Minister of the Environment of the "American problem," the burden of proof regarding the availability of clean technologies transferred to industry, and the lack of support helped to secure the more prominent interpretations of the case and its short-term developments.

The last event which probably played a role in the decision to ban hydraulic fracking was Fukushima, who arrived in March just before the Prime Minister decided to ban fracking. In one of her declarations, the Ministry of Environment suggested a link between the two subjects. She explained that citizens must choice between continuing with nuclear power and developing shale gas. Indirectly, Fukushima influenced stakeholders to support nuclear and not have two conflicts at the same time.

²³ AFP, 11/02/2011

²⁴ Déclaration sur Europe 16/02/11

Phase 4. Framing and the reversibility question

We saw earlier that different actors attempted to shift the dominant and critical frame applied to the fracking issue by examining the path of exploration with more appropriate alternative technologies, thus playing the research and innovation card. In the law that banned fracking, one of the four articles keeps this possibility open. But, even if the law offers this possibilities, actors recognize that the Environmental Minister interprets this law narrowly as not leaving any door open. After the decision to ban fracking, a lot of proponents stopped fighting and began to focus on other topics. This process of framing through which the meaning of shale gas was transformed into a problem and fracking was framed as inappropriate technology. Change occurred in May of 2012 when the presidential majority seemed to lock this interpretation of shale gas with the right and left wings both sharing the same position. The director of Total explained that they lost the struggle to define and interpret the issue of shale gas when words like “fracking” and “unconventional” becomes “bad” and largely contributed to industry’s failure to convince the public. But, while this decision seems to be irreversible, since the decision to ban fracking, there have been some attempts to re-open the issue for debate. At the time of the change to a new government, Philippe Martin, former Minister of the Environment, upon leaving his post to Ségolène Royal that he was "proud to have resisted the interior and exterior shale gas lobbies."²⁵ Each attempt helps us to better understand how the frame works and how reversibility can arrive with different opportunities that some actors take.

While proponents of shale gas were few and were not able to construct a narrative linking the development of shale gas to a better future, the issue continued to resurface, each time supported by an economic argument that was assumed to strengthen a scenario of future prosperity in France if this technology was adopted. This new argumentation strategy works by combining the "success story" of shale gas in the United States and a dramatization of the economic situation in France, and it draws on the idea that not choosing shale gas will prevent prosperity in the future.

While at the beginning of 2012, marked by the presidential election, the shale gas issue did not re-emerge in the media except when the issue of compensation to be given to companies whose licenses were revoked surfaced, the situation changed from the summer of 2012, when new voices emerged that sought to revisit the issue of the prohibition on exploration. During the summer of 2012, until François Hollande confirmed the ban on September 14, 2012, on the occasion of an environmental conference, signs of internal discussions within the government and its administration were floating around. On August 22, 2012, Jean-Marc Ayrault said that "the debate is not settled," even though a few days earlier Delphine Batho, the new Minister of the Environment, and François Hollande both stated that the ban would not be revoked. This did not preclude the CEO of Total to call François Hollande a few days later to encourage him to find the “courage” to revive the political process on shale gas.

One of the highlights of this haunting process of recovery is related to the publication of the report written by Louis Gallois in November 2012. In this report, commissioned by the President of the Republic to revive the French economy, Louis Gallois suggests shale gas as an instrument of economic growth. In agreement with his position, the new Minister of Productive Recovery, Arnaud Montebourg, explained that he is in favor of shale gas. And once again, it is the President distanced his own position from that of the Gallois Report, particularly on the issue of shale gas and, in doing so, maintained the dominant frame of the issue.

²⁵ <http://www.youtube.com/watch?v=dN7HFe8O0JY>, le 2/04/2014 ; Le Figaro, 2/04/2014

During 2013, new stakeholders come into the process. Laurence Parisot has repeatedly cited the Gallois report. On a television channel, she debated with the Minister of Environment, Delphine Batho.²⁶ The argument of economic growth and the success story of the thriving U.S. economy are both essential arguments in defense of shale gas and opposition to the law. The president of Total also returned to the scene and the number of proponents of shale gas has increased. When Delphine Batho was removed from her position by the government in July 2013 because of her adversarial relationship with the major groups at the beginning of July 2013 and replaced by Philippe Martin, who is also opposed to shale gas but he has significantly less political weight, Arnaud Montebourg attempted to reopen the debate by proposing the establishment of a public group to explore shale gas. Here we find the trial and error process already mentioned back in action and the actors seizing all opportunities available to them to reverse the law while trying to circumvent the frame in place. In this case, the public group represents a way to respond to the criticism of industrial interest groups who, because of their economic interest, cannot conduct "neutral" exploration.

While so far, only the parliamentarians opposed to shale gas were mobilized, several parliamentary initiatives in favor of shale gas are emerging. The parliamentary office in charge of the evaluation of scientific and technical choices proposed relaunching the evaluation process and favors the recovery of the shale gas report. Thus, two Members of Parliament filed reports that argued similar positions (see above). As for the new Minister of the Environment, he has already made some public comments suggesting the overturning of the ban.

The processes through which some actors attempt to reverse the ban essentially represent argumentative attacks against the ban. These attacks help us to better understand how the critical frame works as it resists the efforts of proponents of shale gas embodied by their arguments to reverse the ban. Every time actors attack a proposal, there is an opportunity to shift an argument as each argument works to keep the door to overturning the ban closed. The strength of these arguments depends on its resistance to the implications of public debate and also the (high) position of its spokesman.

However, beyond these rebalancing forces, the dominant, critical frame is very much intact. In ministries, the subject of reversing the ban remains relatively taboo. Actors prefer to invest their energy and their careers into other more important issues. Many have given up and even the IEA, which used to produce 20-year forecasts, does not believe that France will change its position, reflecting less what will happen than what actors think may happen.

Conclusion

In all critical processes that we observe, the emergence of groups able to challenge routinized frames of expertise and consultation scares established communities of experts, since in their investigation these new audiences can critique the modes through which data is constructed, analyzed, and interpreted (Zask 2011). But beyond the challenge of frameworks of expertise, it is often, as in the conflict between agricultural models around GMOs, an opposition between worldviews: the technical controversy creates a scene for the rebellion of groups who do not wish to be locked into the role of a "public." From a sociological point of view, it is therefore necessary to reinstall the worldviews in the practical experiences of the sensible world, led by all kinds of effects, percepts, lines of strengths and weaknesses, folds, and benchmarks, to use the language of the sociology of perception (Bessy and Chateauraynaud 2014). Rebellion takes first shape in sensitive trade, in which

²⁶ <http://www.youtube.com/watch?v=QQQEGDJJZw>, 5 juin 2013

it may remain silent for a long time, by grasping multiple effects and percepts through interactions with things, and it can be deployed gradually from sign to sign. Its public invisibility for those who remotely apprehend the ordinary life of a milieu explains their surprise when the contestation suddenly arises.

Not surprisingly, we find here the elements that are at the heart of pragmatist thought, and in particular the concept of democracy developed by John Dewey. There is nothing surprising here: chronic political and institutional crisis in Western democracies (Rosanvallon 2006, 2011) leads us to reconsider the forms of government and public construction. How does collective mobilization, by extending the field of criticism, influence the policy-making process (see Zittoun 2013)? More specifically, how does the critical, regulatory or radical, influence the games of institutional actors who advocate issues, whether administrative reforms, industrial projects, or broader public policy (e.g., taxation, environmental measures, programming research, etc.)? These are areas of research and very fruitful topics of possible discussion to go further than the only procedural codification of socially acceptability criteria, taking into account all forms of irreducibility and incommensurability argued by actors.

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