# Environmentally-blind discourses on coal extraction and the idealization of the miner in Spain

Amaranta Herrero and Louis Lemkow a

<sup>&</sup>lt;sup>a</sup> GenØk – Centre for Biosafety, Norway. Email: <a href="mailto:amaranta.herrero@genok.no">amaranta.herrero@genok.no</a> (corresponding author) Institut de Ciència i Tecnologia Ambiental – Universitat Autònoma de Barcelona, Spain. Email: <a href="mailto:Louis.lemkow@uab.cat">Louis.lemkow@uab.cat</a>

The authors thank Fern Wickson, Kevin Buckland, Martin Pescador and Irene Cruz and the anonymous reviewers for their useful comments in the development of this article. This work was supported by a PhD grant (AP2007-01504) from the Spanish Ministry of Education; and Project CSO 2010 21979 on Social Metabolism and Environmental Conflicts from the Spanish Ministry of Science and Innovation.

Abstract: The aim of this paper is to explain why there is broad popular support for the coal industry in Spain, despite its negative socio-environmental impacts, both globally and locally, and a significant drop in mining jobs. In a context of protests in favor of the continuation of state subsidies to the coal industry, the main frames of the pro-coal discourse are identified using content analysis of press news and official documents. Results suggest that there is a framing of the debate in which: 1) the context of anti-cuts protests covers up the specific demands about the continuation of the coal industry; 2) the miners' situation is presented only as a consequence of globalization processes; 3) the environmental dimension is conspicuous by its absence. We conclude that a de-contextualized social imaginary of the figure of the miner has been essential in gaining support for demanding continued subsidies for the coal industry.

**Keywords:** environmental conflicts, coal mining conflict, social imaginaries, treadmill of production, environmental communication, framing.

#### Introduction

During the summer of 2012, fierce and intense protests by the Spanish coal-mining sector took place in different parts of the country, driven by a 63% cut in government subsidies received by the sector that year. The miners went on indefinite strike and used highly visible confrontation to demand the continuation of both coal subsidies and the coal industry generally. Thousands of people from all corners of Spain and also from the international arena, especially from the left of the political spectrum, showed their support for this environmentally unfriendly sector whose contribution to employment and domestic production, paradoxically, had dramatically shrunk in recent decades. This raises the question of how such widespread support was mobilized among groups that, ostensibly, one would expect to be critical of coal as an energy source?

In this article we will explore some clues to understanding this widespread uncritical popular support for an extractive industry that generates major environmental damage through the mining and burning of coal, and which no longer provides clear socio-economic benefits to the local communities where it operates in terms of employment. To do this, we will specifically focus on 1) documenting the main features of the Spanish coal industry and the dramatic reduction that it has experienced over the past twenty years; 2) analyzing how the debate over coal has been framed, identifying and exploring the elements that characterize the pro-coal discourse with which mining trade unions, mining companies, and large sectors of society justified the protests; 3) examining the social imaginary of the figure of the miner and its mobilizing force.

# The treadmill of production and social imaginaries

Within environmental sociology, the 'treadmill of production' is one of the most important concepts addressing the interwoven relations between capital accumulation, the state

and the environment (Buttel 2004). In order to explain why environmental damage in the US rose dramatically after WWII, Schnaiberg (1980) outlined a political-economic model concerning the correlated relations between economic growth and environmental degradation: the treadmill of production. Essentially, this model claims that modern industrial modes of production, especially capitalism, necessarily imply an accelerating spiral of ecological destruction, to the point at which the bioregenerative rhythms of ecosystems or the absorbing capacity of natural sinks are often surpassed or indeed collapsed. The structural force driving this treadmill is its inherent concentration of capital, competition dynamics (Schnaiberg 1980; Schnaiberg and Gould 1994) and also, as Harvey (2010) highlighted, continuous adaptation to overcoming certain limitations imposed either by society (e.g. stricter environmental legislation) or by the scarcity of raw materials.

Gould et al. (2004) explained that capital was being invested to further develop the mechanization of production processes, promoting new technologies that would replace labor, reduce costs and increase profits. At the same time, these new technological developments required additional inputs (energy or chemicals) to replace earlier processes, more intensive in labor. In order to boost and maintain productivity at higher levels and also to further increase profits, industries needed to focus incessantly on cost reduction and new investments. Thus, each round of investments increased profits, but also further degraded the environment. As Bell and York (2010) note, this pattern of generating a continuous spiral of profits while increasing rates of ecosystem depletion and pollution has become the core operating framework of the global market. The treadmill can be seen as a self-reinforcing system but one that is highly dependent on social forces and subject to the impact of politics. Here, according to Schnaiberg (1980) the state plays a prominent role, responding to the collateral environmental damage created by capital-intensive economic growth and, often, creating and legitimizing policies that encourage further environmental degradation.

Side effects of the treadmill of production in the social domain also include job blackmailing, precarious work and displaced workers (Gould et al. 2004), which, perversely, can be supported by the workers themselves. Discarded workers have also assimilated the idea that these technological changes were a requirement for both social development and increasing or maintaining their material standards of living. Thus, each round of mechanization and economic expansion has generated more social support for allocating investment to accelerating the treadmill of production. In fact, as several authors note (Gould et al 2004; Bell and York 2010), many people affected by the social and environmental impacts of polluting industries will even fight for these companies and actively and passively silence any protest from environmental groups, which could represent a threat to them (Herrero 2012). In other words, the growing treadmill process puts in place additional mechanisms to discourage protests and mobilizations against these industries. At the same time, it produces "an arsenal of workers that can be mobilized to create a countermovement for the industry in opposition to any efforts to impose stricter environmental regulations and disrupt treadmill processes" (Bell and York 2010, 116).

The way in which the debate on coal mining has been framed in Spain by the media and the main stakeholders has been instrumental in gaining general public support for this extractive industry. *Framing* here is understood as a strategic communicative process consisting of organizing experience by "assigning meaning to and interpreting certain events and conditions

in ways that are intended to mobilize potential adherents and constituents, to garner bystander support, and to demobilize antagonists" (Snow and Benford 1988, p.198). In other words, framing will be referred to as the way involved groups strategically present their messages for their intended audiences to try to influence how a situation unfolds (Fiss and Hirsch 2005, 29) and to make their activities, goals, and ideologies as "congruent and complementary" with the values, beliefs, and interests of the public (Snow et al. 1986, 464).

At the same time, certain dominant discursive elements of the framing interweave with other cultural elements shaping the debate. Indeed, a major element in mobilizing popular support has been the strong social imaginary of the miner as a historical figure who symbolizes the struggle against social injustices. A social imaginary (Anderson 1983; Taylor 2006) refers to the shared and unified mental life of certain groups of people, shaped by specific beliefs, meanings and cultural models. It involves the core-assumptions people use to make sense of their social environment. Taylor (2006) describes three features of social imaginaries: 1) they are not primarily expressed in theoretical terms, but are manifested through images, stories and legends; 2) social imaginaries are shared by broad groups of people or the whole of society; 3) they are a collective conception that makes possible common practices and a broadly shared feeling of legitimacy. Thus, the social imaginary of the miner can strengthen pro-coal positioning by legitimizing the demands of workers collectively claiming a right to work (and asking, in effect, for the continuation of the coal industry and its subsidies).

While respecting and acknowledging that coal miners and their unions played an essential role in the struggle for improved working and social conditions, as well as trade union rights *in the past*, the argument that we develop below is that a pro-coal alliance (led by the coal industry) deliberately shaped the debate over the continuation of coal mining in Spain to ensure the continuity of subsidies. This shaping took place by avoiding the environmental and other controversial aspects of coal extraction and the use of coal, while maintaining and encouraging an idealized, powerful and deep rooted historical social imaginary of the miner as a symbol of the working class struggle.

#### State aid and EU regulations shaping the treadmill of coal extraction in Spain

Historically, Spanish coal companies have been aided through subsidies, tax incentives, and debt waivers<sup>1</sup> (Sen 1999) but in the past 20 years, coal extraction has been heavily influenced by the liberalization policy of the European electricity market, which seeks to end state aid by 2018 (Euroactiv 2010). During this time, the sector has been declining, following the dictates of EU policies and a gradual phasing out of subsidies. These dynamics have taken place along with a parallel process of reducing production costs based on a gradual mechanization involving a shift towards a surface mining production model, a gradual concentration of Spanish coal mining corporations, and a consequent dramatic reduction of the number of workers employed (Sánchez 2007).

Figure 1 shows the evolution of coal production in Spain between 1950 and 2010, as well as the changes in the number of jobs in this sector. During the 1960s, coal extraction experienced a downward trend prompted by the massive introduction of oil. During the 1970s it recovered slightly because of the oil crisis of 1973, the intensification of mechanization and the beginning of surface mining in Spain. From then until 1990, the figure reflects the classical

dynamics explained by the theoretical model of the treadmill of production: extraction increased and mechanization intensified with the increasing introduction of surface mining, hence exacerbating environmental impacts and decreasing the number of workers in the sector. In the early 1990s, however, a series of events marked the beginning of a process of radical change in Spanish coal mining that would be reflected by four plans to restructure and reduce coal extraction (Sánchez 2007). These included: the end of the energy crisis, technological changes in production, low international coal prices, more strict environmental legislation, and the need to adjust prices and state aid to EU legislation on the new common electricity market.

## [Figure 1 here]

According to data from Spanish Mining Statistics (MITyC 2012), since 1990 coal extraction has dropped by 76.5%, while the number of workers has also declined by 85.7%, to 6429 workers². During this period, many companies carried out expansion plans, absorbing smaller companies (Sánchez 2007). They have also increasingly pushed for surface mining and continued to make great profits despite the restructuring³. For example, between 1998 and 2004, the private companies *Coto Minero del Cantábrico* (formerly known as *Minero Siderúrgica de Ponferrada*) and *Unión Minera del Norte*, generated a profit of 23 and 90 million Euros respectively (Sánchez 2007). This profit, however, needs to be looked at in light of the total record subsidies of €24 billion that were given to the sector between 1990 to 2012.

Since 2010 there has also been additional indirect financial support to this sector through the implementation of the 'Coal Act', which subsidizes coal-fired power stations to meet part of the costs of buying domestic coal and to ensure its combustion. This policy was implemented after coal – especially domestic coal - was being displaced from the Spanish electricity mix by an increase of renewable energies and gas-fired power stations (see Figure 2), reducing its contribution to demand coverage from 26% to 7% in just three years<sup>4</sup> (REE 2011). So, unlike global trends where there has been a trend for increasing coal use (BP 2012), in Spain this fossil fuel, both from domestic and imported sources, has been rapidly disappearing from the electricity mix.

In 2010, following strong lobbying from the coal sector (Europapress 2010a), and a burst of combative miners' protests (encouraged largely through the withholding of wages to workers by some of the private coal mining employers (Europapress 2010b)), the government passed the controversial aforementioned 'Coal Act'. This Act regulated the electricity market through the establishment of, on the one hand, an obligatory quota for coal-based power generation of up to 15% of electricity demand and, on the other hand, an advantage for domestic coal usage by granting subsidies<sup>5</sup> to power stations to buy and burn Spanish fossil fuel (BOE 2010). In 2011, this policy, which clashes directly with climate change policies, led to a 35% increase over the previous year in the CO<sub>2</sub> emissions related to the ordinary electricity market, despite a decrease in Spanish energy consumption due to the economic downturn (CNE 2012).

## [Figure 2 here]

Since the 1990s, while the Spanish coal industry generated increasing negative environmental and social impacts, its main profits were predominantly made possible by the receipt of what has been termed *perverse subsidies*, or "superb support for *un*sustainable development" (Myers and Kent 2001:xvi), for both coal extraction *and* combustion. Additionally, there has also been an accelerating shift towards surface mining and thus a decrease in labor costs, which has further increased profits for mining companies. Somewhat conveniently, coal industry expansion in recent decades has not so much focused on increasing the extraction rate as struggling to both maintain domestic coal within the electricity mix and retaining state aid for as long as possible, either by extending the old system of coal aid or establishing a new system of subsidies for coal as a "strategic energy reservoir". The following quote from a press interview to the president of the Spanish association of coal mining employers demonstrates this point (italics added):

Carbunión's proposal consists of a 2020 plan for a strategic reservoir with a stable production, employment and subsidies niche. This is to say that it has to be a coherent plan, regarding the previous one, but with the establishment of a minimum exploitation reservoir of 10 million tones, with a plan for continuity. What we are not going to accept is a closure plan and I do not think the trade unions are going to accept that either.

In the treadmill, state and capital interests are aligned in support of growth policies. From 1990 to 2012, the Spanish state had been supporting ecologically destructive development in pursuit of specific goals, which were aligned with the interests of the coal industry. In fact, the Kingdom of Spain was found guilty by the Court of Justice of the European Union for not complying with the Directive of Environmental Impact Assessment in relation to the coal mining activity in the Laciana Valley, a protected area under EU legislation (CJEU 2011). One reason that could explain this state and coal industry alignment, especially during the 2004-2011 period, could be that the Socialist Party (PSOE), the party in government during that time, was heavily dependent on the mining areas for electoral support and simply couldn't risk a revolt against them by the workers of the industry.

## Methodology

To uncover some of the principal elements shaping public support, this study used two main approaches: content analysis and field observations. Following the methodological approach outlined in Bell and York (2010), data was collected from different sources reproducing a pro-coal discourse and reporting on the actions taken by stakeholders during the protests. This included: (1) articles published in the regional and national press in June and July 2012 (two months in which there was a Spanish miners' strike and when the protests intensified after the announcement of cuts to mining subsidies); (2) press releases, official documents and support letters from political parties, trade unions and other groups and associations (such as the 'M-15 movement'6), and (3) websites from the Spanish association of coal mining employers, main trade unions, main political parties and others. In total, 80 articles were selected from a combination of the regional press sources *Diario de León*, *La Crónica de León*, the national *El País* and *Público* newspapers, and news agencies such as Europapress, EFE and Euractiv. We also analyzed three support letters from social movements and political parties, and four press

releases from national and regional trade unions. Additionally, we visited and gathered data from several websites and blogs that provided visual and audiovisual material (flyers, posters, images and videos) for the analysis.

The coding process was driven by the related questions: What are the main elements shaping the pro-coal discourse? What frames were used to mobilize so many people? The first question allowed us to make a list of key words and sentences illustrating different dimensions of the debate related to both the dominant pro-coal discourse and the actions taken by some of the stakeholders involved. These themes were then grouped into broader categories, which were identified as the different frames of the supportive discourse. These themes were then developed further by analyzing their core position, catch-phrases, depictions, visual images, consequences, and the principles they appealed to. Special attention was paid to the discursive vacuums, that is to say, the omissions of relevant aspects of the coal-mining sector. These vacuums were also considered key elements of the pro-coal discourse and its framing.

## Setting the terms of the coal debate

The discourse in favor of the continuity of coal subsidies gained broad public support during the 2012 miners' protests. At least three significant frames contributed to mobilizing this public support: (1) opportunistic use of social discontent towards austerity measures, (2) presentation of the problem as an outcome of globalization, and (3) exclusion of important information from the public debate.

## Frame 1: Opportunistic use of discontent towards austerity measures.

Although a Spanish pro-mining alliance<sup>7</sup> had been *struggling for years* to extend coal subsidies beyond the 2018 target set by EU legislation, the 2012 miners' protests were presented as if they were *solely* the result of the Spanish government cuts. In other words, the miners' protests were strongly framed as a significant component of the context of unprecedented austerity measures. EU-driven structural neoliberal economic policies<sup>8</sup> were put in place, dramatically affecting the lives of a very broad section of Spanish society, resulting in wide public discontent. The *particularist* interests of the industry were successfully aligned with *universalistic* demands against widespread cuts to the welfare state. This frame was highlighted in the messages of the country's main unions (see Figure 3).

# [Figure 3 here]

The following quote from the 'resolution in support of the miners' struggle' presented by *Izquierda Unida* (United Left Party) illustrates this point:

Spanish society knows what it is at stake. The PP government [right wing] is taking decisions that are dismantling the state. They are weakening our wounded welfare state. They openly eliminate any sort of subsidy aimed at consolidating or maintaining the Spanish productive sector.

The focus of the media's portrayal of these protests centered on the miner's resistance, drawing visual parallels to the plethora of social struggles in contemporary Spain. Reinforcing this frame, the powerful images reproduced by the mass media (see Figure 4) showed the miners marching towards the capital; running through the woods with homemade weapons; chaining themselves to the Spanish Ministry of Industry; blocking roads and railways; and confronting police in towns and villages, turning them into battlefields. This 'opportunistic frame' appealed to the principle of resistance and solidarity against social injustices due to economic adjustment.

#### [Figure 4 here]

This frame together with the combative expression of the miners' protests was extremely successful in mobilizing popular support and led to consecrate the figure of the miner as an icon of anti-cuts policies. The specificities of this *long-term struggle* and its concrete demands on coal extraction continuity, however, were eclipsed by the anti-cuts discourse.

## Frame 2: Mining crisis as a consequence of globalization

Within this frame, the problem that coal extraction faced was presented in the context of the globalization debate, indicating that 'domestic coal' was being abandoned in favor of 'imported coal', the extraction of which, it was argued, was generating social and environmental problems in the countries of origin. Because the debate was only presented as a choice between domestic or imported coal, the nature of coal as an energy source, as such, was left unquestioned. Consequently, in this context the promotion of extraction and combustion of Spanish coal was framed as a more ethical choice with respect to Spanish energy policy, thus warranting a higher price and meriting subsidies to compensate the additional costs.

The following quote from a letter written by a miner, published in several sources, illustrates this point:

It is said that imported coal is cheaper than the domestic one. Do you want us to work under slavery conditions like it is done in those countries? I do not want any worker of this world to be a slave.

This framing thus appeals to the principle of justice by strengthening national markets to avoid the negative social effects of globalization trends, characterized by offshoring (the relocation of industry for economic advantage), which often leaves thousands of workers unemployed.

In addition, environmental concerns were only used demagogically to support the antagonism between domestic and imported coal, by equating their polluting effects. It was argued that given that both types of coal 'apparently' pollute to the same degree, there should be a preference for domestic coal. A quote from a flyer of the main trade unions in a mining valley of Leon exemplified this point:

[Why we fight for coal mining in Spain?] It is the only energy sector, the only domestic fossil energy, which our country has. Because the environmental excuse no longer fools anyone. Imported coal also pollutes ... even more.

Furthermore, as the above quote also illustrates, in order to reinforce the defense of coal extraction, the reasoning behind it has often emphasized the need for coal to maintain energy security. The argument that "coal is the only energy source Spain has" is commonly used in Spain to support the discourse on energy security, which highlights the dangers and risks of dependency on imported fossil fuels. At the same time, this argument ignores the significant and increasing share of renewable sources of electricity in Spain, which provided 32% to the electricity grid in 2011 (REE 2012), and also excludes information related to the poor quality of Spanish coal. These arguments create a framing in which the Spanish coal industry is seen as an essential and ethical part of the national energy economy. This, however, ignores the previously mentioned data that showed the significant decline in coal usage that has taken place, without harming the overall national energy mix. It also exemplifies the extent to which this frame has been appropriated and incorporated into the dominant discourse surrounding Spanish coal.

#### Frame 3: Invisibilities within the debate

On technological changes of production

One of the most striking omissions within the debate about coal continuity is related to the mechanization changes of coal mining over the past 40 years. In 2010, 58% of coal was extracted with surface mining (MITyC 2011). This often implies using controversial extraction techniques, such as Mountaintop Removal Coal Mining (MTR) which involves the explosion of mountain tops and, as several authors have reported (e.g Burns 2007; Palmer et al. 2010), generates significant damage to ecosystems and local communities<sup>9</sup>.

Moreover, working conditions have also experienced a great transformation due to these changes of extraction methods. For instance, machine operators are not recognized as miners, as they do not undertake dangerous and unhealthy mining below the surface, nor are they included under the special coal mining legislation, which provides favorable social security payments and economic compensation for the risks that they take. Also, as some informants have reported, the MTR workers can have very long workdays (12 hours per day up to 6 days in a row, followed by 3 days off). As MTR can be active day and night, they can also have long night shifts, increasing the possibility of accidents. Additionally, most of the workers are hired through subcontracting companies, and are shifted between these companies every 6 months, so they do not accumulate labor rights. Thus, in this new technological and highly mechanized context, precarious work has been generalized and promoting the traditional image of an underground miner with strong labor rights seems misleading.

#### Twenty years of subsidies for restructuring

A second significant omission of the pro-coal discourse consists of not mentioning that the mining restructuring plan started twenty years ago, and the fact that €24 billion has already

been invested in order to help create alternative employment in mining areas (Senado 2012). Also omitted from the debate is the role of the EU in setting up the end of State aid to coal mining and the radical shrinking in the number of miners. These notable omissions raise the unasked and uncomfortable question of how long do polluting industries 'need' subsidies in order to gradually close their productive activities to avoid a social disaster in terms of job loss?

When combined, these omissions present an image of the cuts in the coal-mining sector as *completely new*, unreasonable and profoundly unfair, since it was argued that thousands of workers would become unemployed from one day to the next, effecting the livelihoods of thousand of families in coal mining areas. The following statement by a center-left (PSOE) senator exemplifies this point (italics added):

If nothing is done, jobs in mining areas are jeopardized from today.

Similarly, excluding any reference to the already existing restructuring plans for coal mining, the main Spanish trade unions presented the following demands to the main political parties:

If current policy remains unchanged, we are facing a dismantling of a key sector in our energy map, which would have serious consequences for some Autonomous Communities [Spanish regions] and for social cohesion in the mining regions.

A miner interviewed in the main newspaper of a mining region also summarized this point as follows:

[The coal industry] cannot be forgotten so suddenly because many people have earned a living from it and coal has given so much wealth [to the communities].

Due to confused figures of the number of active miners, the discourse was also based around the belief that there were *still* many thousands of active underground miners in Spain. In fact, by ignoring the sharp decline in job numbers (see Figure 1), another anachronistic credo was fostered: this is the myth that coal was *still* the main activity of coal mining counties as it was in the past. A center-left (PSOE) Member of the Parliament (MP) illustrated this point during a parliamentary debate:

Coal is like a monoculture product. All the economy is linked and depends upon that activity.

The emphasis on the notion of *coal monoculture* and appealing to the economic community identity of miners is not new. Bell and York (2010) show the coal industry's efforts in West Virginia to maintain the popular belief that the identity of the region still relies on coal, despite sharp drops in the number of miners. In Spain this coal monoculture credo shaped the debate on coal continuity and encouraged protests all over the country.

Global and local environmental problems

A last significant absence in the recent debate on Spanish coal extraction was related to the local and global environmental problems caused by coal mining and combustion. Despite the fact that coal is responsible for about 40% of total global CO<sub>2</sub> emissions from fossil fuel use (Olivier 2012) and its highly mechanized extraction techniques entail important social and environmental impacts, not a single relevant social actor within the debate took these issues as worthy of mention. The following quote illustrates the marginal position that the environment played within the Spanish coal debates. A socialist-party (PSOE) MP defended the continuity of the coal industry in the Spanish parliament and noted that:

[Coal] has a weakness—it pollutes—, so we have to work on that and look for [technological] measures to make it pollute less.

This kind of thinking ignores both the production of CO<sub>2</sub> as an essential part of all combustion and also the destruction of local ecosystems in coal mining areas. The few references made to the environment were very quickly followed by displaying faith in particular, although as yet unproven, unapplied or nonexistent, 'technological fixes', such as Carbon Capture and Storage, or so-called 'clean coal technologies', which would solve coal's environmental issues and allow Spain to continue with the same energy model based on a dependency on fossil fuels. As Fitzerald (2012) points out, the concept of 'clean coal', originally pushed forward by the industry itself, has been an object of social contestation within energy debates. Opponents of these proposed technologies refuse to separate addressing climate change from the other problems related to extremely mechanized extraction methods, such as MTR, and its negative impacts. The following statement from the *Spanish Coal Mining Employers Association* website (2012) also illustrates this dominant discourse, which is often also misleading in respect of CO<sub>2</sub> emissions removal:

Our energy use can have a significant impact on the environment. All the people working in the coal sector are thrilled with the latest technology developments of clean coal technologies. They will allow continued use of this necessary energy source without CO<sub>2</sub> emissions.

This *environmental void* means that the 2012 debate around coal was reduced to the social sphere, only as a matter of worker's solidarity and of opposition to liberalization measures. The necessity of urgently reducing CO<sub>2</sub> emissions and, therefore, to start putting an end to perverse subsidies worldwide, was omitted from the political debate.

The following table summarizes the three previously described frames:

## [Table 1 here]

## The idealized imaginary of the miner

The emblematic figure of the miner has long played a major role in shaping public support for the pro-coal mining discourse. In fact, since the emergence of a modern working class, miners in Europe have been perceived as an emblematic icon of the struggles for union and worker's rights and improved working conditions. Popular identification with the British miner's strikes against Thatcher's liberalization measures is well documented (e.g Gilbert 1995; Warwick and Littlejohn 1992).

In Spain, miners also had an essential role in starting a strike movement under the Franco dictatorship. This movement began in the coalmines of Asturias and extended to almost all of Spain. Although these coalmines were privately owned, the Franco regime had taken control of wage rates and workers' rights. Challenging the illegal status of strikes during Franco's dictatorship, a single coalmine decided to begin a strike and then the other coalmines in Asturias joined their fellow workers to demonstrate their solidarity. As Phalen (2009) notes, while it started as a collective action to appeal for an improvement in their overall working conditions (they demanded wage increases and the right to organize and strike) it very soon incorporated wider political demands and become the symbol of a struggle against Franco. In fact, a significant wave of strikes then spread across different Spanish industrial sectors. In April and May 1962, during the climax of these protests, almost 500,000 workers in 24 provinces carried out a strike action for more than eight weeks. For the first time under Franco, a mass workers movement won major concessions from the state. This underlined the vulnerability of Franco's regime as it was forced to backtrack and take into consideration workers activism to improve living and working conditions. This marked the beginning of the last period of Francoism. As Phalen (2009) also points out, it was an economic justice campaign that evolved into a campaign for democratic rights. Through this period, the figure of the miner was shaped as the icon par excellence of the struggle against socio-economic inequalities and political abuses. It evoked a deep-rooted social imaginary of a workers' movement and its associated political culture committed to the struggle for social justice, and against submission to a dominant ideology that saw the miners merely as a work force to be exploited.

The heroic figure of the miner and mining communities is widely represented in many art forms, including novels, poetry, theatre and film. The social imaginary associated with miners is about struggle, resistance, solidarity, community, and an often-stereotyped form of western masculinity. The strength of the world of mining communities of past generations can be seen through the imagery miners promote. The following image (see Figure 5) illustrates the call for struggle, solidarity and justice put forward by Spanish miners.

## [Figure 5 near here]

Thus, the Spanish miner figure draws on its international and national historical legacy and emerges as a romanticized icon of a fighter against government abuses and a role model for the rest of society. As the Miners' Protest Support Manifesto, signed by academics, artists, actors, writers and other representatives of arts and other Spanish social sectors, illustrates:

The miners' struggle for their jobs is an example of social struggle, fighting spirit and self-organization which must be supported by the whole of the working class and by left-wing people and social movements [...] While banks and bankers are bailed out, cuts fall on working people who are forced to fight to defend their future, miners are showing us the path that must be followed by the other sectors in struggle.

With the recent episodes of Spanish protests, the past history of all miners' protests is brought to the present and its projections of the struggle against social injustices and oppression by the state are revived. As the Secretariat General of CCOO trade union stated:

You, miners, are the mirror in which the working class has to look at itself. 50 years ago, during the strikes of 1962, you challenged the dictatorship.

Even new social movements boost the idealization of the coal miner figure by implicitly suggesting that they could lead to some sort of revolution or to an exploitation-free society:

The strength of miners will be unstoppable if together we are able to extend the mobilization, in both geographical and sectorial terms, if we combine all the struggles, and if we move decisively toward a new general strike [...]. And it is our duty to learn from the miners. If every attack from the bosses, each individual or collective dismissal or every abuse or humiliation to a worker received a similar response to what those fellow miners are doing, the situation we live now would be very different (M-15 Madrid Assembly 2012).

Finally, the social imaginary of miners also appeals to a specific traditional model of masculinity, which is also reified by the protests. As Beckwith (2001) points out, "the popular image of the coal miner is that of a man: brave, physically strong, militant, face blackened with coal dust, fiercely independent, anachronistically loyal to family and community, and violent" (Beckwith 2001:297). Despite a long history of women working inside and outside the mines (Moore 1996; Scott 2007), many authors have identified sex-segregated coal economies in which masculinity and the will to work in dangerous and physically challenging conditions are equated, leading to a rigid system of gender relations and gender ideology characterized by an exaggerated breadwinner male role (e.g Beckwith 2001; Bell and Braun 2010; Magaard 1994; Scott 2007).

This hypermasculine social imaginary also seems to be related to difficulties of engagement in environmental resistance movements. As Bell and Braun (2010) point out, a hegemonic masculinity, linked to the Appalachian coal industry, has the effect of making it difficult for men to engage in environmental justice activism, as questioning coal industry practices appears to be linked to a questioning of traditional Appalachian masculinity.

In a recent study, Scott (2007) analyses West Virginia's miner masculinity and identifies three significant features of coal mining's cultural masculinity: 'the breadwinner model', 'the tough guy' and 'the technological man'. Certainly, similarly to West Virginia's miner masculinity, Spanish coal mining masculinity is also articulated with traditional gender relations within the nuclear family, a model in which the miner is depicted as a responsible family man, as the sole family provider (see Figure 6). At the same time, this traditional male-breadwinner image is consistent with a strict sexual division of labor and an old-fashioned masculine model, oppressive of women (Bradley 1989), which has been also outlined by Maagard (1994) and Bell and York (2010) in the Appalachia case. This traditionally masculine model of male-breadwinner is also commonly reproduced by women from the coal areas, who primarily identify themselves as relatives and supporters of the miners' struggle and the coal economy. The following quote from a communiqué from 'Coal Wives', for the coal-mining summit illustrates this point:

We, mothers, daughters, sisters, miner's wives, women miners, women of mining areas; in short, the COAL WIVES, we suffer the consequences of the mining conflict [...] We ask politicians to seriously commit to coal, for the future of the mining areas and its people. We ask town councils to position

themselves [...] and to bang their fist on the table and stand up defending the interests of villages and its people. As an exchange, we commit to support you; to stand by the miners' side, to fight for jobs and workers' rights; and to defend the continuity of coal mining and the mining regions (Asociación de mujeres del carbón de León 2013).

Also, miners are not just portrayed as family men. As shown in West Virginia and the pictures of Spanish protests shown above (see Figure 4), miners are also 'tough guys' armed with 'blood-and-guts courage' ready and able to physically act to defend their ideals.

Unlike the masculinity characteristics from West Virginia outlined by Scott (2007) (in which, in addition to these two miner identities, also emerged a third one based on technology and modernity that emanates from the expansion of surface mining and the change of skills for workers), in Spain the mining social imaginary strongly holds to a past of underground mining. As mentioned earlier, the mechanization changes associated with mining extraction are not visible in public debates that involve mining and therefore the figure of the miner remains anchored to another time. In short, the miner is always visualized in a heterosexual marriage, usually with children, representing the ideals of a progressive working class and the craft worker and embedding an old-fashioned, conservative model of masculinity.

#### Conclusion

Our aim in this paper has been to understand why the Spanish public gave such enthusiastic support to coal miners' protests that ostensibly benefit a polluting industry with a declining contribution to the economy and employment.

We have presented a study that portrays the Spanish treadmill of coal extraction and uncovers the ways in which the state and coal industry have aligned their interests over the course of many years - mainly through perverse subsidies to coal extraction and combustion resulting in the generation of significant and ongoing environmental problems. Secondly, we have examined the way pro-coal organizations have framed their discourse for the mobilization of a pro-coal movement by effectively linking the claims of the coal industry to the widespread social dissatisfaction with recent austerity measures and the universalistic demands of the current anti-cuts protests. In doing so, it presented the problem as a consequence of globalization and broader economic forces that were already uniting people in protest, and managed to omit from the debate the reality of more controversial elements such as the longerterm trend of mechanization changes within coal extraction, the overarching restructuring plans already in place and taking effect, and the local and global environmental concerns regarding the impacts of coal extraction and coal burning. We also found that public support and identification with the miners' cause have been mobilized through an idealized social imaginary with strong and powerful historical roots, but which arguably is no longer representative of the Spanish mining reality nor necessarily an appropriate social ideal. The projected figure of the miner – as a working class, hypermasculine 'tough guy' – worked as a catalyst for social change in an earlier era, however, it has not only reinforced gender stereotypes, but it has arguably also increased coal extraction and burning, and therefore, lead to a worsening of climate change conditions. The social imaginary of the miner in Spain (as elsewhere) has been so powerful that it seems able to still be mobilised in such a way as to eclipse the deeply problematic aspects of coal extraction and combustion. As a beloved symbol of the leftist struggle, the power of the social imaginary of the miner appears from our analysis to also be capable of rallying support from constituencies that would not typically align with dirty industries. Our analysis indicates that when the employment of this powerful social imaginary was combined with a framing that directly excluded key elements of the current economic, political and environmental reality of the mining industry, widespread public support could paradoxically be generated for this polluting industry with a declining contribution to the economy and employment.

In short, we have shown how polluting industries can successfully frame their messages and use emblematic icons anachronically decontextualized to gain support and legitimacy in order to reproduce certain *perverse* forms of social organization that clash with the urgent planetary need to reduce extractive industries and fossil fuel emissions.

#### References

- Anderson, Benedict. 1983. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Beckwith, Karen. 2001. "Gender Frames and Collective Action: Configurations of Masculinity in the Pittston Coal Strike." Politics & Society 29 (2): 297-330. doi: 10.1177/0032329201029002006.
- Bell, Shannon Elizabeth, and Yvonne Braun. 2010. "Coal, Identity, and the Gendering of Environmental Justice Activism in Central Appalachia". *Gender & Society*. 24(6):794-813. doi: 10.1177/0891243210387277
- Bell, Shannon Elizabeth, and Richard York. 2010. "Community Economic Identity: The Coal Industry and Ideology Construction in West Virginia". Rural Sociology, 75(1):111–143. doi: 10.1111/j.1549-0831.2009.00004.x
- BOE 2010. Real Decreto 134/2010 por el que se establece el procedimiento de resolución de restricciones por garantía de suministro. Ministerio de Industria, Turismo y Comercio. <a href="http://www.boe.es/boe/dias/2010/02/27/pdfs/BOE-A-2010-3158.pdf">http://www.boe.es/boe/dias/2010/02/27/pdfs/BOE-A-2010-3158.pdf</a>
- BP 2012. Statistical Review of World Energy 2012. London: BP.
- Bradley, Harriet. 1989. Men's work, women's work: A sociological history of the sexual division of labor in employment. Minneapolis: University of Minnesota Press.
- Burns, Shirley Stewart. 2007. Bringing Down the Mountains: The Impact of Mountaintop Removal Surface Coal Mining on Southern West Virginia Communities, 1970-2004. West Virginia: University Press.
- Buttel, Frederick. H. 2004. "The Treadmill of Production: An Appreciation, Assessment, and Agenda for Research". *Organisation & Environment*, 17(3):323-336. doi: 10.1177/1086026604267938

- CJEU 2011. Judgment of the Court. EC v Kingdom of Spain. Case C-404/09. European Court Reports
  2011 Page 00000. <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62009CJ0404:EN:NOT">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62009CJ0404:EN:NOT</a>
- CNE 2012. *Informe Anual de Supervisión del Mercado Eléctrico 2011*. Comisión Nacional de la Energía. http://www.cne.es/cne/doc/publicaciones/PA\_SUP-mercado-electrico11.pdf
- Euractiv 2010. "Commission Proposes Phasing Out Coal Subsidies". *Euractiv.* July 22. <a href="http://www.euractiv.com/energy/commission-proposes-phasing-out-coal-subsidies-news-496532">http://www.euractiv.com/energy/commission-proposes-phasing-out-coal-subsidies-news-496532</a>.
- Europapress 2010a. "Carbunión Acusa al Gobierno de Provocar el Impago de nóminas y anuncia el desembolso de una mensualidad". *Europapress*. October 9. <a href="http://www.europapress.es/economia/energia-00341/noticia-economia-carbunion-acusa-gobierno-provocar-impago-nominas-anuncia-desembolso-mensualidad-20100910114102.html">http://www.europapress.es/economia/energia-00341/noticia-economia-carbunion-acusa-gobierno-provocar-impago-nominas-anuncia-desembolso-mensualidad-20100910114102.html</a>
- Europapress 2010b. "El Gobierno ve injustificable el impago de nóminas". *Europapress*. September 9. <a href="http://www.europapress.es/economia/noticia-gobierno-ve-injustificable-impago-nominas-20100909190142.html">http://www.europapress.es/economia/noticia-gobierno-ve-injustificable-impago-nominas-20100909190142.html</a>
- Fiss, Peer C., and Paul M. Hirsch, 2005. "The discourse of globalization: Framing and sensemaking of an emerging concept". *American Sociological Review*, 70: 29-52. Doi: 10.1177/000312240507000103
- Fitzerald, Jenrose. 2012. "The Messy Politics of 'Clean Coal': The Shaping of a Contested Term in Appalachia's Energy Debate". Organization & Environment, 25: 437. Doi: 10.1177/1086026612466091
- Gilbert, David. 1995. "Imagined Communities and Mining Communities", *Labour History Review* 66(2): 47–55.
- Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg. (2004). "Interrogating the Treadmill of Production: Everything You Wanted to Know about the Treadmill but Were Afraid to Ask". Organisation & Environment, 17(3):296-316. Doi: 10.1177/1086026604268747
- Harvey, David. 2010. The enigma of capital and the crises of capitalism. London: Profile books.
- Herrero, Amaranta. 2012. "Laciana is black. Greens go away'. Environmentalists as scapegoats in a MTR socio-environmental conflict in the Laciana Valley (Spain)". Organisation & Environment, 25(4):417 434. Doi: 10.1177/1086026612464973
- Maggard, Sally Ward. 1994. "From farm to coal camp to back office and McDonald's: Living in the midst of Appalachia's latest transformation". *Journal of the Appalachian Studies Association* 6 (1): 14-38.

- Mateos, Araceli and Alberto Penadés. 2013. "España: Crisis y recortes". Revista de Ciencia Política (Santiago), 33(1):161-183.
- Méndez, Rafael. 2006. "170 millones de multa a una mina por excavar sin licencia un monte protegido". El Pais, 15 December. <a href="http://www.elpais.com/articulo/sociedad/170/millones/multa/mina/excavar/licencia/monte/protegido/elpepusoc/20061215elpepisoc 2/Tes">http://www.elpais.com/articulo/sociedad/170/millones/multa/mina/excavar/licencia/monte/protegido/elpepusoc/20061215elpepisoc 2/Tes</a>
- MITyC 2011. Estadística Minera España 2011. Ministerio de Industria, Turismo y Comercio. <a href="http://www.minetur.gob.es/energia/mineria/Estadistica/Paginas/Consulta.aspx">http://www.minetur.gob.es/energia/mineria/Estadistica/Paginas/Consulta.aspx</a>.
- MITyC 2012. Series de estadísticas mineras anuales. Ministerio de Industria, Turismo y Comercio. http://www.minetur.gob.es/energia/mineria/Estadistica/Paginas/Consulta.aspx.
- Moore, Marat. 1996. Women in the Mines: Stories of Life and Work. NY: Twayne Publishers.
- Muñiz, Alfredo. 2009. "El Gobierno condona 5.000 millones a los empresarios mineros a cambio de puestos de trabajo". *El Confidencial*. September 20. <a href="http://www.elconfidencial.com/espana/gobierno-condona-millones-empresarios-mineros-cambio-20090920.html">http://www.elconfidencial.com/espana/gobierno-condona-millones-empresarios-mineros-cambio-20090920.html</a>#
- Myers, Norman, and Jennifer Kent. 2001. Perverse subsidies. How tax dollars can undercut the Environment and the Economy. Washington: Island Press.
- Olivier, Jos G.J. 2012. *Trends in global CO2 emissions; 2012 Report.* The Hague: PBL Netherlands Environmental Assessment Agency.
- Palmer, Margaret A., E. S. Bernhardt, W. H. Schlesinger, K. N. Eshleman, E. Foufoula-Georgiou, M. S. Hendryx, A. D. Lemly et al. 2010. "Mountaintop mining consequences". *Science*, 327(5962): 148–149. doi:10.1126/science.1180543
- Phalen, Anthony. 2009. "Spanish coal miners challenge Franco dictatorship, 1962". Global non-violent action database (Accessed May 14, 2013).

  http://nvdatabase.swarthmore.edu/content/spanish-coal-miners-challenge-franco-dictatorship-1962
- REE 2011. *El sistema eléctrico español en 2010*. Madrid: Red Eléctrica de España. http://www.ree.es/sistema\_electrico/informeSEE-2010.asp.
- REE 2012. *El sistema eléctrico español en 2011*. Madrid: Red Eléctrica de España. <a href="http://www.ree.es/sistema">http://www.ree.es/sistema</a> electrico/informeSEE.asp.
- Sánchez, Jesús. 2007. "La reestructuración de la minería leonesa" [The restructuring of coal mining in León]. Pecvnia. 4: 171-199.
- Sanchón, Justino. 2014. "Imputadas todas las empresas mineras de León por fraude en las subvenciones al carbón". *El Diario*. February 11.

  <a href="http://www.eldiario.es/meseta/Imputadas-empresas-mineras-Leon-subvenciones">http://www.eldiario.es/meseta/Imputadas-empresas-mineras-Leon-subvenciones</a> 6 227887228.html

- Scott, Rebecca. 2007. "Dependent Masculinity and Political Culture in Pro-Mountaintop Removal Discourse: Or, How I Learned to Stop Worrying and Love the Dragline". *Feminist Studies*, 33(3): 484–509.
- Schnaiberg, Allan. 1980. The Environment. From surplus to scarcity. Oxford: Oxford University Press.
- Schnaiberg, Allan, and Kenneth Gould. 1994. *Environment and Society: The Enduring Conflict*. Caldwell:The Blackburnpress.
- Sen, Luis Carlos. 1999. La minería leonesa del carbón. 1764-1959. León: Universidad de León.
- Senado 2012. Interpelación sobre las previsiones del gobierno en relación con el cumplimiento de los compromisos adquiridos con el plan nacional de reserva estratégica de carbón. Exp. 670/000027. Spanish Government.
- Snow David, E. Burke Rochford Jr, Steven K. Worden, and Robert D. Benford. 1986. "Frame alignment processes, micromobilization, and movement participation". *American Sociological Review* 51: 464-481.
- Snow, David, and Robert D. Benford. 1988. "Ideology, frame, resonance and participant mobilization". *International Social Movement Research*, 1(1): 197-217
- Taylor, Charles. 2006. Imaginarios sociales modernos. Barcelona: Paidós.
- Vivas and De Miguel. 2010. "Mina Linares: carbon negro y prejubilaciones sin trabajar". *El Comercio*. February 11. <a href="http://www.elcomercio.es/v/20100211/economia/mina-linares-carbon-negro-20100211.html">http://www.elcomercio.es/v/20100211/economia/mina-linares-carbon-negro-20100211.html</a>
- Warwick, Dennis, and Gary Littlejohn. 1992. Coal, Capital and Culture. A sociological analysis of mining communities in West Yorkshire. London: Routledge.

#### **Endnotes**

\_

<sup>&</sup>lt;sup>1</sup> Some of these include, subsidies for extraction, subsidies for domestic consumption (1999-2006), the Coal Act or, more recently, waiving a debt of €5.000 million in 2009 (Muñiz, 2009).

<sup>&</sup>lt;sup>2</sup> This number includes 3990 underground miners, 1102 surface-mining workers and the rest refers to technicians, and administration and managerial stuff (MITyC, 2010).

<sup>&</sup>lt;sup>3</sup> An example of what Spanish coal companies have been willing to do in order to get the subsidies: In 2010, the coal company *Carbones de Linares* was declared guilty of fraud for bringing coal from Australia and selling it as Spanish coal to get the coal subsidies (Vivas and De Miguel 2010). Also, in February 2014, six Spanish coal companies (private and public) and twelve managers were charged for fraud related to Coal Aid (Sanchón 2014).

<sup>&</sup>lt;sup>4</sup> This 7% referred to both imported and domestic coal combustion.

<sup>&</sup>lt;sup>5</sup> In 2011, the subsidies for domestic coal usage totaled € 798 million (Senado 2012).

<sup>&</sup>lt;sup>6</sup> The M-15 or the 'outraged movement' ("los indignados") is a broad and diverse social movement, which erupted in May 2011 in different cities of Spain, simultaneously. This movement demands radical changes in Spanish politics and involves a wide spectrum of protests and other activities.

<sup>&</sup>lt;sup>7</sup> This pro-coal alliance consists of the main Spanish Trade Unions (UGT-FITAG and CCOO), the Spanish Association of Coal Mining Employers (CARBUNION in Spanish), the Association of Coal Mining Areas (ACOM in Spanish), and some political parties such as PSOE and IU.

<sup>&</sup>lt;sup>8</sup> According to Mateos and Penadés (2013), some of the most significant changes in Spanish policies in terms of EU-driven austerity cuts are: a) Labor market reform; b) Tax increases; c) Public sector hiring freeze in 2012, public sector wages and minimum wage freeze; d) Departmental budgets reductions by €600 millions; e) Delayed retirement age to 67; f) Withdrawal of health service for illegal immigrants; g) Cuts in infrastructure investment; h) Reform of court fees; i) Cuts in Education.

<sup>&</sup>lt;sup>9</sup> In Spain, for more than 20 years, some of MTR activities have illegally taken place in special areas protected by EU environmental legislation, such as in Laciana Valley (León). In fact, they have been fined by Spanish courts (Méndez 2006) and convicted by the Court of Justice of the European Union (CJEU 2011). Despite the illegalities, the most important private coal mining company in Spain, never paid the fine and its activity continued until September 2013, when it declared itself bankrupt.