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In the Defence of Place: Environmental Justice and the Anti-Fracking Movement in Argentina

Malayna Raftopoulos and Damien Short***

Abstract: Having lost its energy self-sufficiency due to the exhaustion of conventional fossil fuels and rising domestic consumption, the Argentine government has increasingly looked to shale gas to transform its energy mix and resolve an 'energy crisis'. Historicising justice claims by examining the social, political, and economic relations that generates and sustains fracking, this article highlights how Argentina's energy transformation is reproducing multiple systemic injustices, in particular the historical configuration of state society relations around natural resources and the struggle for (environmental) democracy and social equity, as well as supporting patterns of political and economic power and racial ideologies. Despite these challenges, the anti-fracking movement has formulated collaborative processes and mechanisms of engagement driven by the core principles of environmental justice and are challenging fracking through a variety legal-judicial and political strategies. However, as the cases of Mendoza and Neuquén demonstrate, confronting and dislodging the state-oriented power relations that are embedded in extractivism remains extremely challenging.

Keywords: *Fracking, Vaca Muerta, Argentina, Environmental Justice, Mobilisation, Resistance*

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Introduction

Following the discovery of vast amounts of shale gas deposits in 2010 by Repsol-YPF (Yacimiento Petrolíferos Fiscales) in the Neuquén basin, known as Vaca Muerta (Dead Cow), the region has become both nationally and geopolitically significant due to its wide-ranging socio-environmental, political, and economic impacts (Acacio and Wyczykier 2020). Envisioned both as a means of achieving energy self-sufficiency and as a productive economic development, the promotion of fracking has sparked the emergence of one of Argentina's largest environmental movements. Since 2012, against a backdrop of an increasing deficit in Argentina's energy balance of trade, a growing energy crisis shaped by rising domestic consumption, flawed policies including excessively low prices and subsidies, and the continuous decline in foreign investment, production, and hydrocarbon reserves, successive governments have placed fracking at core of their energy security and economic growth plans (Salomone 2020). In May 2012, the National Congress enacted the Hydrocarbon Sovereignty Law (Law No. 26,741/12), declaring the achievement self-sufficiency of national public interest and a priority. Consequently, the government of Cristina Fernández Kirchner renationalised 51 per cent of the shares of Repsol-YPF which were privatised during the 1990s under Carlos Menem's neoliberal reforms. Furthermore, the National Executive, alongside YPF, developed a joint exploration and exploitation strategy of unconventional hydrocarbons across several provinces. Like his predecessors, President Alberto Fernandez, who took office during the midst of an economic crisis and just prior to start of the global pandemic, placed fracking at the centre of the country's economic revival. While fracking activity came to a complete standstill during the pandemic following the collapse of global commodity markets, the changing geopolitical situation with the Ukraine war, has seen the national government once again push ahead.

This article contributes specifically to the environmental justice, and more generally the social scientific literature, by exploring the lived experiences of environmental justice within the Argentine context and how claims of injustice are linked to broader social, political, and economic processes. It adopts a multifaceted approach to environmental justice both spatially, by extending the conceptualisation of justice beyond individual human beings to community-level and the non-human world, and temporally by examining how collective memories shape current struggles. The article demonstrates that within Argentina, the anti-fracking movement employs the term in the construction of its collective identity and as an organising theme to express

and politicise their multi-scalar struggles rooted in the desire for procedural justice and recognition and underpinned by environmental values.

1. Environmental Justice and the Defence of Place

In the twenty-first century, a growing environmental consciousness has ensured that developments such as ‘hydraulic fracturing’ are closely examined in political and academic circles (Thomas et al. 2017). Moreover, O’Neill and Schneider (2020,1) suggest that ‘opposition to fracking has risen in recent years.’ Studies have shown that public attitudes toward hydraulic fracturing for shale gas seem to vary by geographic areas and to be correlated with attitudes about the environment and economic development, while proximity to a well/s, media use, political affiliation, education and gender all influence support for shale gas development (O’Neill and Schneider 2020; Thomas et al. 2017). There has also been much scientific discussion concerning the environmental, social, and emotional harms that often accompany hydraulic fracturing development such as fugitive emissions, seismic activity, climate change and adverse health (Bamberger and Oswald 2012; Hou et al. 2012; Jackson 2014; O’Sullivan and Paltsev 2012; Sovaocol et al. 2020; Stamford 2020). There is often considerable tension between local communities, local and central governments, and the interests of the oil and gas industry when it comes to the use of hydraulic fracturing for shale gas (Cotton 2017 for UK example). Social scientists have also examined perceptions of ‘risk’ and ‘opportunity’ that surround fracking (Ryder, Devine-Wright and Evensen 2020) and the wider economic and geo-political dimensions such as those concerning ‘energy security’ (e.g. Kruyt et al. 2009) but the literature examining anti-fracking activism, mobilisation and local democracy and how this relates to the ubiquitous propaganda ‘battle...to win the public’s hearts, minds and confidence [especially] within communities where exploration fracking for shale is underway’ (Jones et al. 2015, 379) is still relatively under-developed. Moreover, research on fracking remains highly centred on the global North and relatively little research has focused on the anti-fracking movement and how environmental justice dimensions and demands are framed within the context of the global South (Raftopoulos and Specht 2022).

The proliferation of social resistance against extractivist activities like fracking has been accompanied by a resurgence in interest in the concept and defence of particular constructions of place and the global environmental justice movement which although grounded in local grievances is connected through global networks (Acselrad 2008; Carruthers 2008; Escobar 2001 &

2008; Martínez-Alier 2001; Martínez-Alier et al. 2016). In recent years, the environmental justice literature, influenced by concerns over climate change and climate justice, has become more pluralistic and multi-dimensional. It has come to encompass multiple aspects of justice including, resource redistribution, institutional recognition, political representation, and social and environmental recovery (Nygrem, Kröger and Gills 2022; Schlosberg and Carruthers 2010). Consequently, reflections on environmental justice have moved beyond recognition of inequity in the distribution of environmental issues to understanding how environment and nature create the conditions for social justice and refining the different mechanisms and processes of environmental injustice (Scholsberg 2013). Undoubtedly, one of the most important shifts in the framing of environmental justice has been its spatial and temporal expansion. The literature has expanded in both terms of its topical and geographical scope (Scholsberg 2013), examining the global and transnational dimensions of environmental justice movements discourses and frames (Benford 2005; Walker 2009; Holifield, Porter and Walker 2009) as well as the role of different groups such as the indigenous movements and labour movements within the environmental justice movement (Cole and Foster 2001). More recently, environmental justice scholars have begun to adopt decolonial approaches (Álvarez and Coolsaet 2020; Pulido and De Lara 2018), engaging with the critical Indigenous literature to rearticulate 'notions of justice outside of Western legal systems [...] [which] includes various kinds of inter-generational, more-than-human justices that are founded in relationality, reciprocity, responsibility and decolonisation rather than individual human rights' (Nachet, Beckett and MacNeil 2022, 100949; Dhillon 2018).

The environmental justice discourse has also expanded beyond individual human beings to encompass the community-level (Scholsberg and Carruthers 2010) and the non-human natural individuals and systems (Scholsberg 2013). Temporally, the literature, in exploring new forms of contestation that make claim to justice and social transformation, considers how current struggles are shaped by collective memories, how claims are shaped over time and across scales and how the nature-society relationship is articulated (Di Chiro 1998 & 2008; Raftopoulos and Specht 2022; Schilling-Vacaflor, Flemmer and Hujber 2018; Urkidi and Walter 2011). Escobar's work highlights the relationship between nature and society, and demonstrates how subaltern knowledges, shaped by the experience of coloniality and emerging through social movements and indigenous organisations territorial struggles, have the potential to become spaces for the articulations of alternative imaginaries and facilitate the pluriversality of socionatural formations (Escobar 2008, 12). For Escobar, place-based cultural, ecological, and economic practices,

regardless of if they are produced by “the global”, offer alternative visions and strategies to the ‘standardised narratives of capital and modernity’ (Escobar 2001, 165). The alternative visions often conflict with the practice of terranullius that accompanies extractivist activities by ‘rendering empty the places it occupies and making absent the worlds that make those places’ (Blaser and Cadena 2018, 3). Increasingly, environmental justice mobilisation seeks to rearticulate the natural environment’s role and move away from modernist paradigms and linguistic concepts such as ‘growth’, ‘productivity’, ‘efficiency’ and ‘market economy’ by adopting narratives based on plurality and coexistence rather than on dialectical dualities and hierarchies. Using environmental justice as analytical lens, this article aims to understand how local communities mobilise against fracking through ‘formal, informal mainstream and subaltern channels’ (Nygrem, Kröger and Gills 745, 2022) and use environmental justice as an organising theme to both express and politicise their multi-scalar struggles and claims centred on official recognition and social and environmental recovery and grounded in the defence of place. Environment justice literature and fracking intersect in several keyways, and the relevant literature has grown substantially in recent years as the practice has moved forward in both the global north and south (Clough 2018; Johnston et al. 2020; Kroepsch et al. 2019; Sovacool et al. 2020; Short and Szolucha 2019; Ryder and Malin 2021). Crucially, the framework emphasises how forms of discrimination are responsible for the disproportionate concentration of environmental hazards in low-income communities, communities of colour, and indigenous communities (Whyte 2019) and how communities have organised to oppose such conditions (Stretetsky et al 2022).

2. Methodology

Twelve in-depth interviews were primarily conducted between March 2022 and September 2022 with members of different water assemblies in Mendoza and Neuquén, environmental non-governmental organisations, human rights organisation, an indigenous community leader, union leaders and political party members. We followed ethical standards outlined by the European Research Council and the General Data Protection Regulations to ensure the protection of personal data and the rights, safety, and well-being of those involved in the project. Consent was received by all participants. The interviews were recorded, stored on a secure server and interviewees were assured they would remain anonymous. The interviews were later codified by searching for the key themes and concepts within each interview

and compared to each other. Thematic coding was applied in accordance with Braun and Clarke's (2006) framework [(1) familiarise data, (2) generate initial codes, (3) search for themes, (4) review themes, (5) define themes (6) write up] and the software Nivo was used to ensure the reliability and validity of the frame analysis. The first step involved the repeated readings of the interviews to become familiar with the data and develop an initial broad coding strategy. Secondly, using these initial codes a mind map was produced, allowing for any other codes to emerge. Thirdly, the data was coded for topic areas and themes and fourthly, a word cloud produced, allowing for the reviewing of the coding and to show the finer codes. Lastly, the codes were catalogued whereby there was one code per theme. The themes which emerged most strongly were social and environmental harm and recovery with a strong emphasis on the defence of water and the right to a healthy environment, and procedural injustice and recognition.

3. Resistance to Fracking in Argentina The Anti-Fracking Movement in Mendoza

Following the introduction of national legislation to promote the exploitation of and investment in hydrocarbons, citizens through local assemblies and organisations have engaged in a series of mobilisations against fracking. In line with Mendoza history of social-environmental mobilisations against extractivism, in particular open-pit mining (Wagner 2021), a hybrid movement of actors has formed in opposition to fracking. The conflict around fracking was somewhat dormant for several years following the successful campaign of local assemblies to pass anti-fracking ordinances, leading to the declaration of several municipalities to be free of fracking (San Carlos, Ordinance 1431/13; Tupungato, Ordinance 8/13; General Alvear, Ordinance 3934/13; Tunuyán, Ordinance 2917/18; and Lavalle, Ordenanza 1071/19). However, on July 24th 2017, the provincial government of Alfredo Cornejo authorised the company El Trébol to carry out the first pilot tests to exploit four oil wells (PETRE.MD.N.CP-1013, PETRE.MD.N.CP-1015, PETRE.MD.N.CP-1017 and YPF.Md.Nq.PR -59) in the Puesto Rojas area in the Cerro Pencal deposit in Malargüe. The authorisation of fracking and unconventional mining was later extended to the Province of Mendoza in March 2018 following the signing of Decree 248 without legislative endorsement or environmental impact studies.

Although opposition to fracking in the province of Mendoza has been growing since 2013, the anti-fracking movement was most recently reenergised by the modification of Law 7722 which acted as a key political

moment. Although there are currently no fracking activities in Mendoza, there is a strong broad based anti-fracking movement made up of a diverse set of actors including local assemblies, environmental movements, trade unions and left-wing political parties. However, the movement is principally led by the water assemblies and spearheaded by the Mendoza Assemblies for Fresh Water (AMPAP), a platform created to coordinate action to protect water resources throughout the province. AMPAP acts as an umbrella organisation for the local water assemblies such as Maipucina Assembly for Water, Las Heras Assembly, Xumek Assembly and Tupungato Assembly who often collaborate with Mapuche territorial movements such as the Malaweche Territorial Identity Organisation. The local assemblies elect two to three representatives to AMPAP which then organises meetings every two to three months in different locations throughout the province. Another important umbrella organisation is the Environmental Multisector of Mendoza which brings together various organisations including Fridays for the Future, Youth for Climate Mendoza, Extinction Rebellion Mendoza, the water assemblies, human rights organisations like Xumek, left-wing parties such as *Unidad Popular* as well as trade unions including the State Workers Association (ATE).

In the province of Mendoza, though slogans such as Mendoza Free of Fracking and No Fracking in Argentina, the anti-fracking movement is pushing for a ban on fracking and the revoking of Decree 248. The anti-fracking movement has also supported alternative imaginaries to fracking that take into consideration socio-political, environmental, economic, and territorial relations. One such local initiative is the creation of a biological corridor and the first national park in the province of Mendoza to protect the Uspallata Valley from extractive activities and turning the area into a 'sacrificial zone'. In addition to its conservation value, the proposed Uspallata-Polvaredas Protected Natural Area which would cover approximately 400,000 hectares, has the potential to generate a variety of jobs and productive micro-enterprises, as well as establish itself as a tourist destination, attracting both national and international tourists. The movement argues that it offers a productive model that is both socially inclusive and in harmony with the environment and common goods. Despite being stuck in the Legislature since 2015, the anti-fracking movement continues to demand that the authorities urgently deal with and approve the creation of the Uspallata Polvaredas Protected Natural Area.

The movement has adopted both intuitional and extra institutional protest actions. Highly suspicious of the 'hegemonic' media, members use social media, community radios, podcasts, webinars, the installation of booths in local parks, farmers markets, next to the local legislature, organise

community meetings, presentations and talks at schools, hand out flyers in the street, paint murals, collect signatures as well as organise protests. Moreover, radio dramas like *La Compañía* have emerged. Broadcast all over the country on community radio stations belonging to the Argentine Forum of Community Radios (FARC), the show gives visibility to environmental issues around the country such fracking in Allen (Río Negro) and the struggles for water and the water assemblies fight against the modification of Law 7722 in San Carlos, Mendoza. The anti-fracking movement has also looked to judicial measures in their fight against fracking. In 2017, anti-fracking movement took the provincial government to court over its illegal authorisation of fracking activities. While the irregularities were recognised by the court, the authorisations were not annulled. Following the court's decision, the OIKOS Environmental Network filed a lawsuit with the Mendoza Supreme Court of Justice in 2018 to challenge the legality of Decree 248 which regulates how the fracking process must be carried out to explore and exploit unconventional oil in the province and establishes that fracking has very low or little environmental impact. The OIKOS lawsuit argues that the fracking regulations set out in Decree 248 violate both national and provincial constitutional provisions on environmental protection, as well as federal environmental law, because they fail to adequately control fracking as well as protect the right to a healthy environment. In February 2020, while the first hearing was held to debate the constitutionality of the decree, the anti-fracking movement including members of AMPAMP, organised a demonstration outside and inside the courthouse. The case was adjourned until 31 October 2020 to allow OIKOS to gather evidence to present to the court. In 2021, several organisations such as *Xumek*, the Environment and Natural Resources Foundation (FARN) which acts as a platform for the collective construction of democratic and participatory citizenship, and the nonprofit environmental law organisation Earthjustice presented an amicus curiae supporting Oikos' rejection of the Decree and while most of them were rejected, one is still pending review.

4. The Anti-Fracking Movement in Neuquén

In 2011, Governor of Neuquén, Jorge Sapag, presented the More Energy Programme, a 5-year plan (2012-2016) for the development of non-conventional oil and gas blocks in the province, identifying the basins for development. However, strong opposition to fracking only began to emerge in August 2013 following the signing of Law No. 2867 by the Neuquén legislature and several municipalities, including Zapala (Ordinance

512/13), Junín de Los Andes (Ordenanza 2523/15), and Villa Pehuenia (Ordenanza 381/15), implemented ordinances to ban fracking. There was coordinated action between organisations such as the Argentine Association of Environmental Lawyers (AAdeAA) and South Oil Observatory (OPSUR) involved in the anti-fracking movement and municipalities to come up with the legal framework to prohibit the exploitation of hydrocarbons in their territories. The ratification of the agreement between the provincial government and Chevron-YPF (Executive Decree No. 929/2013) to carry out an unconventional hydrocarbon exploitation development project in the Loma Campana area of Vaca Muerta acted as a key political moment in the mobilisation of opposition. In addition to ratifying the agreement, the Provincial government of Jorge Sapag also extended YPF's permit to drill in the Vaca Muerta until 2048 and amended the Provincial Environmental Legal Framework whereby the drilling of unconventional wells was included among the activities that only required an environmental impact report rather than an environmental impact assessment. Although territorial conflicts with Mapuche communities are not new to the Neuquén basin due to its long history of extractivism (Svampa and Viale 2014), the exhaustion of conventional sources and subsequent decline in revenues has led the Neuquén provincial government to push for development of Vaca Muerta to reactivate its main economic activity and once again reignited opposition. In January 2022, among widespread opposition to fracking in the province, Chevron was awarded a new concession to exploit hydrocarbons through fracking adding 43 unconventional oil and gas projects covering an area of 9,532 square kilometres in the Province of Neuquén (El Periodico de la Energía 2022).

The antifracking movement is principally led by the Mapuche Confederation alongside the umbrella organisation the Multisectoral Assembly Against Fracking which consists of the local water assemblies, teacher trade unions like the Teaching Union of the University of Comahue and the Workers Association of the State (ATE), organisations such as the Permanent Assembly for Human Rights of Neuquén (APDH), *La Revuelta*, OPSUR, left-wing political parties including Pino Solanas, *Unidad Popular*, *Frente de Izquierda* and *El Movimiento Socialista de los Trabajadores* (The Socialist Workers Movement, MST). The Multisectoral acts as a shared space for the various organisations to meet, debate issues and develop strategies based on consensus. Discussing the organisation of resistance against fracking in 2013 one interviewee recalled:

‘It was tripanto wiñol, which is what is known as the Mapuche New Year, and it was during this time that an open meeting was

organised. The Mapuche communities invited civil organisations and society in general to participate in part of the celebration. There was also some information there on the subject and the idea of setting up a multisectoral assembly began to emerge. It was later called, if I remember correctly, Multisectoral Against Fracking. The assembly began to meet with people from APDH (the Permanent Assembly for Human Rights of Neuquén), ATE, then the Neuquén teachers' union, which is also a union that has always been very combative, and then some assemblies for water and small environmental groups began to participate. Amid all that, it started... we had already been meeting for a few months, when this issue of the Chevron-YPF agreement came up, I don't remember the dates right now..., but let's say this assembly was armed against fracking that let's say was at its strongest point of struggle and representation when the Chevron-YPF agreement was signed in the Neuquén legislature. In reality, the Chevron-YPF agreement was at the national level, but since hydrocarbon exploitation depends on the provinces, not the nation..., that is, the owner of the deposits is provincial, let's say... that agreement was at the national level, it had to be endorsed by the Neuquén legislature and there was a day of tremendous struggle, of repression, the police advanced all day, the protesters retreated, the protesters advanced, the police retreated... gases..., a tremendous day of struggle' (interview 2022)

Two main streams of resistance have emerged: One from the communities impacted by fracking that organise through the multi-sectoral platform and the other from the youth sector involved in climate change activism through organisations like Greenpeace. Whereas the former focus on direct actions in their territories, the youth movements actions are more focused on the city of Neuquén. Furthermore, left-wing political parties like *Frente de Izquierda* are involved in fighting against the hegemonic discourse that there is no alternative than to continue with the oil industry and fracking in Neuquén, make public relevant information, organise debates and public hearings in the legislatures and raise any issues in congress. While they support the actors in the territories impacted by fracking, they are not involved in the protest strategies but do publicise any protests.

Focusing its efforts on the social and economic harms of fracking and alternatives to fracking, the anti-fracking movement has adopted a more an anti-capitalist stance and is challenging the official narrative that fracking offers an opportunity for energy security and sovereignty by contesting Argentina's neoliberal energy production model. As one respondent commented, 'the question is who are you fighting against: a government, a model, or a system? We are fighting the system' (interview

2022). Discussions surrounding fracking in Neuquén have become closely entwined with debates related to development strategies and indigenous identity, cultural and territorial existence. The Mapuche are campaigning for the decommodification of natural goods and energy through the adoption of a more integrated development framework that breaks with which 'the dependence of the productive models promoted by the Argentine State' and is based on the indigenous concept of *Kvme Felen* [live well] which advocates for harmonious living between the human and non-human and protects 'Ñuke Mapu' [Mother Earth] and its life cycles (Mapuche Confederation of Neuquén 2016). In 2016, the Mapuche Confederation of Neuquén released The Political Document of the III Patagonian Parliament where, in addition to calling for the restitution of the territorial environments, recognition of the genocide committed against them and reparations, they established 'a clear position against the implementation of a model of capitalist, neoliberal and inhumane development that collides and threatens any possibility of projecting a territory with its own identity and worldview. This model is currently supported by the extractive industry: mega-mining, fracking, soybean monoculture, forestry, and tourism' (Mapuche Confederation of Neuquén 2016).

However, due to the province's long history with hydrocarbon exploitation which dates to the discovery of the Loma La Lata gas field in the 1950s, the organisation of resistance against fracking was much more difficult than in Mendoza largely due to Neuquén's 'lack of diversification of the productive fabric and the absence of alternative political projects' (Etienne-Greenwood and Escobar Blanco 2023, 130). For over sixty years the *Movimiento Popular Nequino* (MPN), greatly influenced by Peronism, dominated Neuquén's political scene through its strategy of clientelist control, only recently losing power to Rodolfo Figueroa (a former MPN member) in 2023. As Etienne-Greenwood and Escobar Blanco argue, opposition to fracking was 'stopped by the legal backing of the political apparatus in favour of Vaca Muertas exploitation and the mobilisation of several social organisations embedded in Peronist networks. The Kirchnerist politicians (left-Peronists) [...] have historically been linked to class organisations [...] through which they have been able to implement their societal views at the political, bureaucratic, and economic levels (2023, 130). Following the signing of the Chevron-YPF agreement, the movement in Neuquén province became more fragmented. Protests have become more isolated, and actions are now aimed at directly impacting the oil companies operating in the area. For example, in December 2022, the Mapuche Confederation of Neuquén and residents of Añelo organised a blockade of five main fracking deposits in Vaca Muerta to demand that the government move forward with the already agreed

territorial survey that would legally recognise fourteen communities in the area and title community lands and to complain about the lack of water the city of Añelo. Members of the movement pointed out that although communities agree with its environmental claims and issues it has been difficult to mobilise support because the MPN, which has governed for the last sixty years, has invested a lot of money in pro-fracking propaganda and against the anti-fracking movement. However, participation notably spikes when extractive activities touches parts of everyday life of citizens living in the cities, particularly in relation to water. For the anti-fracking movement, water management demonstrates that the negative environmental impacts of fracking are not bound by particular localities but are linked to the increasing global concern over the environmental crisis. As one member commented:

‘We are in a water crisis here in Neuquén, and fracking, in particular, consumes many, millions of litres of water. When our water is cut off, then the community comes out to reclaim it’. That is where it begins, at least from what we see, to visualise a scenario where social commitment becomes much stronger and that is where we understand that it is necessary to work together to energise and motivate the moment to grow through the own need to fight against something that is emerging and that somehow installed as an agenda that reflects the environmental crisis that exists worldwide (interview 2022).

5. Environmental Justice and Fracking in Argentina Social and Environmental Harm and Recovery: In the Defence of Water and the Right to a Healthy Environment

Anti-fracking resistance in the provinces of Mendoza and Neuquén is deeply rooted in the defence of place. Motivated by procedural injustice and environmental values, these movements have denounced the government for illegally and illegitimately approving fracking through slogans such as ‘we do not grant you a social license’. Although social licences are not a legal concept, the concept carries considerable weight and was developed as a response to the United Nations principal of Free Prior and Informed Consent (FPIC). Based on FPIC, it has become globally accepted that companies require the broad acceptance of its activities by the local communities to build and operate (Wilburn and Wilburn 2011). In the province of Neuquén, the irreversible social and environment harm caused by fracking is central to their campaign. One respondent in Neuquén noted that the social damage and health concerns are highly visible in areas like Añelo, the epicentre

of Vaca Muerta, and Rincon de Los Sauces, where both conventional and nonconventional oil exploitation occurs:

‘Patagonia appears to be large extensions of nothing, but it is not nothing. There is biodiversity, there is vegetation, there are animals, and in some places, there are also communities living there or nearby. For the people living there, the environment and health are directly related. In very short time it can be seen. For example, with the number of miscarriages there are today in these territories then there were in relation to 30 years ago. Also, human trafficking, drugs, and gender violence are all exacerbated in these territories. There is a very large social deterioration typical of oil exploitation. It’s tremendous. For example, Añelo is a town that a few years ago had three thousand inhabitants, today there are around fifteen thousand. There are 5 like casinos and they still haven’t built a hospital. In the Añelo area, about 90 percent of the people work in oil, so renting is very expensive. What happens is the teachers, the doctors, the nurses, the people who are not in the oil industry, with incomes that are a quarter of what oil gives you, have no way of living there because everything is 10 times more expensive. Also, there is a very important economic problem because all the prices are at oil prices. So, it generates a very large inequality (interview 2022).

Reflecting on their involvement in the large protests in 2021 in Neuquén when, in alliance, health workers and Mapuche communities formed forty pickets throughout the province cutting off key oil routes, blockading plants, and operating bases of companies, including the YPF sand plant, one interlocutor commented:

‘These are not propaganda actions. They are direct actions to paralyse production [...] Although health workers were there over a pay dispute there is also concern about how the oil industry affect health in an integral way. Although there are no concrete studies about fracking and cancer cases, but all the nurses say we see more cases of cancer in this zone principally in men and we associate this with men who work in the petroleum sector. In Rincon de Los Sauces, health workers have commented on the problematic consumption of drugs and alcohol in this locality. It is a very masculine industry with many days spend in the field alongside this culture of putting up with extreme conditions [...] Many of the health workers had never blocked a route before let alone alongside Mapuche communities. It is a question of inequality. They relate public health to the drought. They say that the petroleum companies take everything and leave nothing’ (interview 2022).

Conflicts around natural resources are not new in Argentina (Svampa & Viale 2014) and both Mendoza and Neuquén have a history of organising

around environmental issues, particularly relating to water (Saldi et al. 2014). Through slogans such as ‘no more pollution in Patagonia’, the anti-fracking movement has warned of the serious environmental and health consequences due to contamination from fracking in Vaca Muerta, in particular the collection and treatment of toxic waste due to the lack infrastructure to treat such a high volume. Fracking residue stored in overwhelmed plants and clandestine pools is overflowing during the rains and flowing into the canyons and then onto the Neuquén River. A recent report confirmed widespread contamination from hazardous waste by the plants of the Sanitation and Materials Recovery Company S.A. (Comarsa) (Bianco et al., 2021). Interviewees also drew attention to the increase in seismic activity in the province, particularly around Sauzal Bonito and Añelo. had ever been recorded in Sauzal Bonito. By May 2022, the number of earthquakes had reached 350 (FARN, 2022). In July 2021, FARN together with the Lof Wirkalew Mapuche community and the inhabitants of Sauzal Bonito filed an appeal with the Federal Justice of Neuquén where they demanded that the provincial government take the necessary measures to prevent fracking activity from causing earthquakes in the area. The lawsuit represents a collective cause for the protection of the right to a healthy environment and environmental justice as laid out in the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (the Escazú Agreement), which is already law in Argentina. It was filed following the persistent denial by companies and the provincial authorities of the link between increased seismic activity and fracking and the lack of preventive measures in place to address the occurrence of earthquakes or any other human or natural damage generated. After appealing the decision by the Federal Court that the decision should be taken by the provinces, the case was referred to the Supreme Court of Justice of the Nation where a decision is currently awaited (FARN 2022).

In the province of Mendoza, the protection of water has become a central concern of the anti-fracking movement. It is linked to the province’s long history of unequal access to water resources whereby control of and the large-scale redistribution of local water resources has been shaped by dispossession and policies that have traditionally favoured local elites and European immigrants over autochthonous populations (Escolar and Saldi 2016) as well as water scarcity due to its arid climate. The province is experiencing changes to its hydrological cycle because of the decrease in snow precipitation and the retreat of the glaciers in the surrounding Andean mountains and is currently in the middle of one of the worst droughts on record. Fracking, due to its large water usage, endangers the province’s productive matrix as well as threatening life. Unlike Neuquén whose regional productive matrix is tied to

the hydrocarbon sector, Mendoza's is more diverse. However, its agricultural economy, based on the wine industry, vegetable cultivation and livestock production is highly dependent on the network irrigation system composed of a complex network of watercourses which covers around 8100 km and takes water from rivers and alluvial aquifers that comes from snowmelt or glacier melting (Massone et al. 2016, 519).

Within Mendoza, rivers are a critical element of the natural physical environment and essential to the survival of communities but also for the development of the "productive" oases and the maintenance of the local economy. The province is home to three oases 'considered to be the products of enterprising European colonists (specifically Italian immigrants in the early twentieth century)', which have been transformed into agricultural and urban spaces and are fed by snowmelt in the surrounding mountains and the Andean rivers (Escolar and Saldi 2016, 272). Consequently, the province has undergone a territorial reorganization through the deployment of a binary notion of territoriality based on a viable/unviable division. This zoning of territories has in turn created two dominant imaginaries of national geographic space whereby regional economies are measured according to the rate of return: Firstly, the idea of an efficient territory and secondly, the image of empty territory or sacrificable territory (Svampa 2008). Within the province Mendoza, this division has historically been equated to the categories of 'desert' and oasis', in which the latter is viewed as productive space and considered to be product of 'modern technology and universalist rationality' while the former is considered 'as unproductive space and disposable in the name of progress' (Escolar and Saldi 2016, 272). The issue of fracking is symptomatic of structural problems, particularly unequal access to resources, and this language of valorisation of territories. As one interviewee put it:

'In Mendoza where we have a degree of drought so bad that the last thing we need, quite rightly, is to take the little water we have from the river and give it to this productive cycle. In those places where they do this type of exploitation [fracking], they are normally considered to a sacrificial zone. That is why there is no social license because nobody wants to live in a sacrificial zone. A place that will end up being totally a desert, empty of its water, contaminated and inhabitable' (interview 2022).

Discussing the solidarity felt among communities in Mendoza in the defence of water from fracking and protection of natural resources, another respondent explained:

‘We keep fighting because they continue to insist on fracking here in Mendoza. From Malargüe they want to go to San Rafael, Tunpungato and start at any moment in Las Heras. The people are more and more aware of the barbarities [of fracking] and we feel like the country is being invaded and that’s why we say that we keep building the people’s resistance. Water and common goods are not for negotiation or to be sold but to be defended’ (interview 2022).

6. Procedural Injustice and Recognition

In the province of Mendoza, concerns are centred on the legislative modifications put forward by the provincial government to loosen environmental protections and pave the way for mining in the province. In 2007, Mendoza passed restrictive legislation on metal mining. Outlining the comprehensive protection of the water resources in the territory of the province, Law 7722 prohibited the use of toxic chemical substances including cyanide, mercury, sulfuric acid in mining processes. Despite efforts from the mining sector to overturn the legislation by claiming it was unconstitutional, Law 7722 was ratified by the Supreme Court of Justice of Mendoza in 2015. On the 20 December 2019, Governor Rodolfo Suárez sanctioned the modification of Law 7722, eliminating the prohibition of the use of chemical substances, except for mercury, in metal mining processes, prospecting, exploration, exploitation and/or industrialisation of metal ores as well as the need for the Declaration of Environmental Impact to be ratified by the provincial legislative body. The changes to Law 7722 sparked a massive citizen response and eight days of protests, eventually leading to its reversal. In October 2021, Law 7722 was threatened once again, and protesters returned to the streets following an appeal by the San Jorge mining company to the Supreme Court of Justice in Mendoza to question the constitutionality of the Law. While the court declared most of the Law constitutional, it controversially ruled that part of article 1 of Law 7722 that prohibits the use of toxic substances was unconstitutional, essentially allowing the mining company to move forward with its mega-mining project in Uspallata and opening the doors for the advancement of mega-mining in the province (ANRed 2021).

One of the key complaints of the antifracking movement has been the lack of transparency, the information available to citizens and citizen participation in decision-making due to public hearings and dialogue tables being non-binding and held in remote areas. As one respondent from Mendoza explained:

‘For decree 248 there was a public hearing. Do you know what they did for this public hearing? The 28th of December, April Fool’s Day, in the middle of the mountain in Malagüe, in the middle of nowhere, nobody could get there. Imagine, if people from Mendoza were going to Malagüe its at least a 4-hour trip, it is on the border with Neuquén and in the middle of the mountain. They do it so that the people don’t participate, they don’t do it to listen to the people. The intention is that nobody goes. There were people as they ended up organising and people went. Do you know how long they gave everyone to express themselves? One minute! So, what happened? Because they only gave everyone one minute all those participating where panicking. What am I going to say in one minute?’ So, there were a few lawyers that said to the people, what we can do in one minute is questions. Put them under the obligation to answer us later. Did you do an environmental impact assessment? Why did you such a thing? Etc. etc. So, we are going to do nothing more than a list of questions and at best, ask six questions in one minute or 10 questions. The people started to ask their questions, and these were the interventions. There were many interventions, and none were taken into consideration, and they were declared inconsistent. This is the type of participation we have today in Argentina, at least in Mendoza in relation to the technique of fracking which obviously doesn’t have a social license, and everybody took to the streets’ (interview 2022).

Articulating a crisis in democracy, the anti-fracking movement also criticised the response of the state to the large protests held throughout the province over the passing of the bill and the measures it took to impede democracy and demobilise popular resistance, including the criminalisation of protesters and the restriction of basic human rights such as the right to protest and freedom of speech. The repression by police against protesters during the large protest held on 23 December 2019 has become part of the collective memory of the anti-fracking movement. One organisation involved in the protests complained that police infiltrated the marches, changing out of their police uniform and to their clothes to blend in with the protesters. Furthermore, drawing on Argentine collective memory, comparisons were made between police brutality during the protests and the ‘dark times of the military dictatorship’ (interview, 2022). However, as another interviewee noted, police repression only served to incite citizens as ‘people react to police brutality because they associate the act with the dictatorship and Argentinian history and repression’ (interview 2022). While in the province of Mendoza, police violence was largely restricted to large-scale demonstrations held in the city of Mendoza, protesters complained against threats and complaints made by local politicians against them.

One protester from a town of around 40,000 inhabitants gave the example of how following a local anti-fracking protest, one politician had filled a complaint against two members of the community for violent behaviour. However, the local police refused to act against the accusations on the grounds that they were present during the protest and did not see the accused display any violent behaviour, leading the politician to take the matter to the regional prosecutor office. The respondent added, 'all this criminalising of the protests, the complaints against our companions, was to discipline the population so that people do not continue to join and that they are afraid of joining these demonstrations' (interview 2022). Discussing their experience with the police another interlocutor commented:

'It is the experience that we have unfortunately had in Argentina, in Latin American and in Mendoza in particular. So obviously I know that every time we go out on the streets it could occur one of these aggressive or violent situations. We lived this when the guys put themselves in [blocked] the route in San Carlos to prevent the lorries from passing to go to Malagüe for fracking. So there intervened the gendarmerie. Many kids were arrested. They were teenagers from high school. They suddenly appeared in the school to know the name of the kids that were there. It was a terrible experience. The boys and girls defending the water, the common goods, against fracking. This happened in San Carlos in the Province of Mendoza, so we know how they act the security forces (interview 2022)'

In Neuquén province, the anti-fracking movement also highlighted the response of the police to the protests, especially the protests that took place following the approval of the YPF-Chevron agreement in the Neuquén legislature. As one interviewee recalled, 'there was a tremendous day of struggle, of repression, all day the police advanced, the demonstrators retreated, the protesters advanced, the police retreated... gasses..., a tremendous day of struggle' (interview 2022). Reflecting on the impact of the agreement on the anti-fracking movement and the difficulty they face in opposing fracking, they noted:

'Once that was approved, it's like, in some way, the assembly began to dissolve, it stopped meeting, like, I don't know, everything was concentrated, all the effort on that day to stop the approval in the legislature and once that was approved, it's like that whole fight collapsed a little [...]. It is very difficult here in Neuquén because Neuquén's economic activity depends 80 percent on fracking, that is, it depends on hydrocarbon exploitation. After that, there was a drop in the price of a barrel, so beyond the fact that this had been approved, oil activity began to fall and that also generated an economic crisis

in Neuquén where people began to say, “we need to reactivate the oil and oil activity” then, that, like it also ends up dismantling the organisation and the environmental fight, like yes, well, we need economic activity then, we can’t fight against this that is a source of work. It is different from what happens with the mining companies, it seems to me. With oil, that fight is more difficult because it is energy, it is economic activity... there are a lot of things that are behind oil, and fighting against it, is like putting yourself against 80 or 90 percent of Neuquén society who lives of it’ (interview 2022).

Another aspect of the anti-fracking campaign has been recognition and the violations of indigenous rights. In Neuquén, Mapuche communities are fighting for consultation to be carried out and consent sought before any project is installed in community territories. The Mapuche argue that they have yet to be consulted by the state with regards to fracking taking place on their territories and were not consulted prior to the signing of the Chevron-YPF deal in 2013. In a written statement submitted to the Secretary-General in August 2016, the Europe-Third World Centre (CETIM) outlined how the whole process took place without free, prior, and informed consultation with the Mapuche community of Campo Maripe and in violation of Law No. 24,071, which ratifies ILO Convention 169 and UNDRIP:

‘The parliamentary session at which the agreement between the province and YPF was approved, ratifying and approving the YPF-Chevron agreement, was conducted sight unseen, and the deputies of the Neuquén provincial legislature had no idea what they were voting on. The justification given for withholding this information was that it was necessary in order to protect trade agreements between private parties; the agreement is still secret’ (United Nations 2016).

Despite the enactment of the emergency Law 26,160 in 2006 by the Argentine government which ordered the National Institute of Indigenous Affairs to carry out the technical –legal– cadastral survey of the ownership situation of the lands occupied by the indigenous communities, the issue of indigenous territories and collective titling remains unresolved and Mapuche communities face eviction and the takeover of their lands. In January 2022, the Mapuche Confederation of Neuquén denounced the provincial government of Neuquén for not complying with the Law and the carrying out the required territorial survey as agreed in October 2021 despite receiving funds from the National Government to do so (Radio Nacional 2022).

In a setback to Mapuche communities in Mendoza, the Chamber of Deputies voted in March 2023 that within Mendoza the Mapuche should not be considered original Argentine peoples and repudiated the recognition of

Mapuche ancestral lands in the south of the province, denying their historical existence. The Mapuche communities, who have formed a movement in the defence of territory, have been heavily involved in the struggle against fracking and other extractivist activities that are being developed in their territories. Commenting on the decision, a member of the Mapuche community explained:

‘Of course, there is a relationship with extractivism. Not only with fracking. There are a lot of oil wells in these territories that they are developing, and it damages the families that have organised themselves into communities [...]. A map presented [in May 2023] at a meeting for the Mendoza Mining Chamber showed a significant number of exploitation projects in the area, more than twenty copper mines. Moreover, there is a concentration of land, of more than 900,000 hectares between [the companies of] Sominar SA, Nieves de Mendoza and Valles Mendocinos, which are territories that belong to us [...]. For the last 10 years, we have gone through a whole process and precisely the reaction today that they have, above all the denialist resolution, is because we have generated a lot of mechanism and we have responded. So, the justice has directly made decisions that even goes against the law (interview 2023).

Discussing the questioning of the identity process of Mapuche in Mendoza, the community member explained, ‘a nationalist discourse has emerged that claims that the Mapuche are “new”, that their communities are not authentically Mapuche and that they are Chileans [...] Mendoza has a much harder time accepting the existence of indigenous group and the propaganda is that they are mining people. They are indigenous people pre-existing of mining activities and agricultural development’ (interview, 2022). In solidarity and alongside Mapuche communities, social organisations, human rights groups, and water assemblies gathered outside the legislature in protesting against the curtailing of indigenous and democratic rights. Protesters argued that this situation has arisen because in January 2023, based on Law 26,160, the National Institute of Indigenous Affairs (INAI) carried out a territorial survey involving three Mapuche communities in Mendoza: Lof Suyai Leufu, El Sosneado and Limay Kurref. However, these communities are involved in a territorial dispute with two large corporations: Sominar SA which has 400,000 hectares and Grupo Las Leñas, which has 500,000 hectares. Furthermore, the Lof Limay Kurref community located in Malargüe have been involved in a legal dispute with the Las Leñas Corporation which has attempted to evict the community from its ancestral territory to carry out fracking pilot tests. The state has looked to circumvent this resistance by indigenous communities to the expansion of extractivist activities in the

Mendoza portion of Vaca Muerta by withdrawing institutional relations and adopting a racist campaign through the removal of their official recognition and rights, denying communities the right to land and their historical existence on provincial soil.

Conclusion

This place-based study on Argentina exemplifies how the contestation of fracking is closely connected to wider social, political, and economic structures. The different outcomes of the anti-fracking movement in Mendoza and Neuquén reflects their different political-territorial realities and tensions, highlighting the importance of understanding 'subnational processes of decision-making and governance and how these intersect with global processes' (Newell et al. 2021, 6). Furthermore, the cases demonstrate the need to historicise justice claims as well as the power and productive relations that generate and sustain activities like fracking in postcolonial societies. Both cases highlight how Argentina's energy transformation is reproducing multiple systemic injustices derived from the continuity of colonial structures in the modern state, in particular the historical configuration of state society relations around natural resources and the struggle for (environmental) democracy and social equity, and supporting patterns of political and economic power and racial ideologies. These deeply rooted issues around democracy and governance have become intertwined with the debate on fracking. Furthermore, the concerns raised by anti-fracking movements in the provinces of Mendoza and Neuquén underscore the contrasting conceptions of and values afforded to nature, landscapes, and natural resources than those configured by the capitalist global system that are based on the rationalistic subject/object dichotomy that lies at the heart of modernity and which negates different constructs of nature. Despite these challenges, communities are collectively challenging the political and economic dynamics that produced fracking and are articulating justice claims that take into consideration socio-political, environmental, economic, and territorial relations. Notions of difference, which have traditionally facilitated diverse forms of accumulation and ensure the continued existence of social-environmental inequality, are being confronted by the broad-based antifracking movement through legal-judicial and political strategies. While the dynamics vary across time and space, communities are mobilising based on their collective understanding and experiences of the social-environmental harms associated with fracking and are employing practices of counter-power to formulate a common agenda for action that moves

away from a unitary model of citizenship to one of collectively. Drawing on direct democracy, the movement has formulated collaborative processes and mechanisms of engagement driven by the core principles of environmental justice. However, as the cases show, confronting and dislodging the state-oriented power relations that are embedded in extractivism is extremely challenging. Recent renewed attempts by the state to contain and curtail indigenous sovereignty through the rejection of the recognition and participation of indigenous peoples demonstrates that ‘the neoliberal model continues to rely on the state to suppress plurinational ‘justice and excludes the possibility reformulating ‘sovereignty as an epistemic and relational – as well as political and territorial – set of relationships’ (Coletta and Raftopoulos 2018, 109).

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